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A Weekly Journal of Pharmacy and the Drug-trade.

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THIS JOURNAL is regularly supplied by subscription to the whole of the Members of SIXTEEN PHARMACEUTICAL SOCIETIES in the British Empire. The associate Journal, *The Chemist and Druggist of Australasia*, published at Melbourne and Sydney, is also supplied to all Australasian subscribers.

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DO NOT MISS THIS.

NEXT week the Annual Winter Issue of THE CHEMIST AND DRUGGIST will be printed.

It will be a beautiful number, with attractive cover and fascinating contents.

It will be a good number to advertise in—to advertise well; but it is necessary for those who wish to take advantage of the issue to secure their space.

Before Tuesday.

We emphasise the "Tuesday" at the request of the Publisher. That is his closing day.

Copies of the issue will be reserved for those parts of South Africa at present inaccessible by post. Business will be resumed there ere long, and it will be good.

Tuesday, January 23, is the last day for securing space in number for general advertisements;

Wednesday for communications to the Editor;

Thursday, January 25, 3 P.M., for small advertisements for the Coloured Supplement.

Summary.

THE IRISH PHARMACEUTICAL PASS-LISTS are printed on p. 81.

MR. JAMES REID again writes about pharmacists and fictionists (p. 103).

STUDENTS get some hints in their Corner this week on how to learn (p. 92).

A COMMISSION has been appointed to inquire into the administration of the Patent-laws (p. 80).

THE CHEMISTS' BALL, and other festivities show that trade has not yet gone to the dogs (p. 85).

OF 314 MINOR CANDIDATES examined in London this month only 76 passed. Their names are on p. 101.

THE INCOMPATIBILITY between sodium arsenite and liq. strych. hydrochlor. has been further dealt with by Mr. J. R. Hill (p. 102).

MR. GLYN-JONES spoke at Blackburn last week regarding the work of the Pharmaceutical Council and its attitude on the company-question (p. 99).

THE SALE OF A WILLESDEN GREEN BUSINESS has given rise to a county-court dispute, in which the purchaser proved that the seller overstated the book-debts (p. 88).

REVISER says "nothing could be more interesting than a report showing why there is nothing to report" on the company-question by the Pharmaceutical Council (p. 93).

AT BIRMINGHAM this week the Pharmaceutical Society has gained one case and been defeated in another in which unqualified assistants were sued for selling poison (p. 86).

AT AN INQUEST IN HULL it was reported that a man had died from an overdose of potassium bromide; but it has since transpired that chloral hydrate was the head product (p. 80).

THE FOOD-PRESERVATIVE COMMISSION has continued its inquiry this week. The evidence was chiefly directed to show that the addition of preservatives to milk is unnecessary (p. 80).

THE EAST HAM MAGISTRATES take exactly the opposite view of the West Ham Magistrate in regard to the authority of the B.P. on the sale of drugs (p. 87). We discuss the subject on p. 97.

THE MARKETS are brisk this week, several articles having gone higher, notably cinchona, quinine, and salicin, but chemicals, drugs, and spices generally are on the up-grade. We report the cinchona and drug sales held in London (p. 105).

BY ROYAL PROCLAMATION the exportation or carriage-coastwise of picric acid, cresol, phenol, and their derivatives, which are used in the manufacture of explosives, is prohibited. The notice has caused excitement in the chemical-market (pp. 84 and 98).

DEATH has been very active during the past week, our obituary-columns containing notices of Mr. Daniel Frazer (Glasgow), Mr. C. Hobson (Beverley), and Mr. G. Lines (Hereford), the last a founder of the Pharmaceutical Society (p. 86). M. Chiris, of Grasse, died on Tuesday (p. 82).

MYRRH AND ITS TINCTURE were the subjects of two papers communicated by Mr. G. F. Merson to the North British Branch on Wednesday evening. The qualities of commercial myrrh were spoken of, and percolation shown to be superior to maceration in making the tincture (p. 102).

A COMMITTEE OF THE MANX HOUSE OF KEYS, which has heard evidence which is chiefly directed to prevent the extension of the company-principle and to add to the poison schedule of the Pharmacy and Sale of Poisons Bill for the island, and the House has introduced a company clause into the Bill (p. 97).

THE PHARMACEUTICAL SOCIETY has appealed against the decision by the Worcester County Court Judge holding that a florist who took an order and the money for arsenical weed-killer supplied direct by the manufacturer was not a seller in the Pharmacy Act sense. The Queen's Bench dismissed the appeal (p. 86).

English News.

Local newspapers containing marked items of news interesting to the trade are always welcomed by the Editor.

To Encourage Botany.

Mr. W. P. Hartley, preserve-manufacturer, Aintree, is to give 12,000/- to build and equip a botanical laboratory at University College, Liverpool, in connection with the Botanical School. This is the third gift from the same donor.

A Committee on Patents.

Mr. Ritchie, President of the Board of Trade, has appointed a Departmental Committee "to consider various suggestions which have been made for developing the benefits afforded by the Patent Office to inventors, and report." The Committee consists of Mr. F. J. S. Hopwood (Chairman); Mr. Ed. Carpmael, President of the Chartered Institute of Patent Agents; Mr. C. V. Dalton, C.B., Comptroller-General of Patents; Mr. J. A. Kempe, Deputy-Chairman of the Board of Customs; and Mr. S. E. Spring Rice, C.B., of her Majesty's Treasury. Mr. Arthur Neeves, of the Board of Trade, is secretary of the Committee.

Entomology.

At the South London Entomological Society on January 11, Mr. F. N. Clark, Chairman of the Public and Poor-law Dispensers' Association, gave one of his descriptive lectures on "Entomology," illustrated by seventy original photomicrographic lantern-slides. Mr. A. Harrison, F.C.S., F.L.S., presided, and there were present many prominent entomologists, including Dr. Chapman, Messrs. Richard South and J. W. Tutt. A life-history series on the Vapourer moth was much admired, as also were a fine collection of eggs of the *Lepidoptera* and several examples of typical insect-structure.

Food-preservatives Committee.

The Departmental Committee on preservatives and colouring-matters in food has been sitting again this week. Dr. S. Rideal, F.I.C., said that 1 part of formaldehyde in 50,000 was sufficient to preserve milk even in warm weather for twenty-four hours, while a mixture of boric acid and borax in the proportion of 1 part in 2,000 produced the same result. The effect of these quantities of preservatives on the digestibility of food, even after contact with it for twenty-four hours, was inappreciable. Much larger quantities than those mentioned might be taken with impunity. Mr. Charles Cassal, F.I.C., said he believed the milk-supply of even a large town could be maintained without the use of preservatives by means of the cold-treatment for milk. The proper method of preserving milk was by refrigeration and sterilisation. If all preservatives could not be abolished, a full and clear statement of the nature, amount, and probable effect of the preservatives used should be given to the purchaser. Mr. de Hailes, analyst to the Dairy Trade-protection Society, said that cold-storage would keep milk a considerable time, but where such storage was not available preservatives were necessary. It was impracticable, if not impossible, to make the purveyor declare the use of preservatives over the counter to all purchasers. Mr. A. Gilbey, of the firm of Messrs. W. & A. Gilbey & Sons, said practically no preservatives were allowed to be used in the wines imported by them, and they were constantly being tested by Professor Dewar, amongst others. He knew there was a wine made in England, a claret, which had been offered to him at 6s. 6d. a dozen. He did not know what it is made from, and it did not have to pay any duty at all. Professor Thorpe (a member of the Committee): Do you think that it is likely to contain salicylic acid?—I should think it is extremely likely. Witness added that it was unlikely that this wine contained grape-juice (although he had seen it labelled "St. Julien"), and it probably contained salicylic acid.—At Wednesday's meeting Mr. Walter Fisher, President of the Society of Public Analysts, Dr. Thomas Stevenson, Mr. T. Carrington Smith, and Professor James Long gave evidence. All were agreed that with greater cleanliness in the preparation of milk, cooling it immediately, and sending it quicker to the place of consumption, preservatives would not be necessary.

Ingratitude.

At Marylebone Police Court on January 11, Frederick Thomas West, commercial traveller, was sentenced to six months' hard labour for embezzling 200/- from his employers, Messrs. Day, Son & Hewitt, Dorset Street, W. The prisoner had been in the firm for twenty years, and was paid a salary of 7/- per week. Last April the firm discovered that West had embezzled about 45/- He expressed regret, and was forgiven; but in December other defalcations were discovered, to which the prisoner confessed. The Magistrate (Mr. Curtis Bennett) commented on the ingratitude of the prisoner towards his employers, who had done so much for him.

What was the Hypnotic?

The Hull City Coroner held an inquest on January 10, touching the death of Harry Wilson Hepworth (38), Hull, who was alleged to have died after taking some bromide-of-potassium crystals for sleeplessness. Mr. Ponsonby, surgeon, said that the cause of death was poisoning by bromide of potassium. Mr. A. L. W. Fletcher, chemist, who supplied deceased with the poison as a sleeping-draught, said Hepworth had some knowledge of chemistry. A verdict of death by misadventure was returned, no blame being attached to the chemist. [This is from a local report. There is no A. L. W. Fletcher on the register, and poisoning with potassium bromide is exceedingly rare. The next paragraph explains matters.—ED.]

The Explanation.

In explanation of the foregoing extraordinary report Mr. A. L. W. Fechtner, chemist, Spring Bank, writes to the Hull *Eastern Morning News* stating that the deceased, who was reported to have purchased the poison at his shop, did not do so, as he brought it to Mr. Fechtner in a stoppered bottle to be weighed out in the required number of doses. Deceased also knew the exact strength of each dose in the draughts, as they were dispensed according to his own directions, and he was quite familiar with the chemical. Moreover, it was not bromide of potassium, but hydrate of chloral.

An Appreciation.

At an inquest held at Derry on January 11, touching the death of a man named James Begley, from heart-disease, it transpired that the deceased, when in a state of collapse, called on Mr. Glendenning, chemist and druggist, Clarendon Street, who gave him a dose of sal volatile and ordered him home at once, and to send for a doctor. Dr. McCaul, in giving medical evidence, said sal volatile was the best thing to give him under the circumstances.

The Foreman: Oh, I am certain Mr. Glendenning acted very kindly and did the best he could.

Dr. McCaul: He or any other pharmaceutical chemist knows well the effect of any medicine; in fact, chemists are supposed to keep the doctors right if they make a slip.

Would be Wept Away.

Holland Winterbottom, the man who sold plain-glass spectacles as "pebbles" (see last week's issue, page 41) to two elderly people at Chadderton, near Oldham, has been sentenced to six months' imprisonment with hard labour. He had told his victims that "if they wore his special glasses for two hours per day, tears would flow from their eyes; these were to be put in a bottle, and the cataracts from which they were suffering would be wept away."

To Leave No Excuse.

The Prestwich District Council has resolved to distribute to the shopkeepers of their district 100 copies of the Sale of Food and Drugs Act which came into operation on January 1.

Thought it Would Do him Good.

A man named Parkinson was charged before the Manchester City Justices on January 11 with trying to commit suicide by taking carbolic acid. The Bench asked him what he took the acid for. Prisoner: I thought it might do me good. What! poison?—I did not think it was as strong as it was. I have taken 4 oz. of laudanum at once, and it said "Poison" on the bottle like this did, and it was the same colour, and so I thought it would do me good. I had not had any sleep for two or three nights.

Death in a Chemist's Shop.

On January 9 a woman named Prince entered the shop of Mr. Joseph Oakey, chemist, 238 Deansgate, Manchester, and asked for some cough-mixture. She sat down on a chair by the side of the counter, while Mr. Oakey was serving another customer, and was suddenly taken ill. Mr. Oakey went to her assistance, and Dr. Mann was sent for, but the woman died before he arrived.

Overdose of Spirit of Camphor.

At the St. Clement's Dale Vestry Hall, on January 15, an inquiry as to the death of John Paterson Stirling (aged 79), elicited the fact that deceased had taken about 1 oz. of spirit of camphor instead of his usual dose of 10 drops. Deceased, according to the medical evidence, died from bronchitis accelerated by an overdose of camphor.

One for the Coroner.

At an inquest held on January 15, at Kensington, before Mr. Luxmoore Drew, on the body of a tailor named Hickman, who had died of bronchitis, a son of the deceased said his father had a great objection to doctors, but wished him to go to a chemist, as he would be able to do him good. Witness obtained a bottle of medicine from a chemist, which appeared to greatly relieve him.

Where did he Get it?

At the Birkenhead Police Court on January 11, Arthur Woods (21) was charged with having attempted to commit suicide. Prisoner, who was staying at a lodging-house, was seen by a fellow-lodger to be ill, and, on being admitted to the borough hospital, showed symptoms of strychnine-poisoning. Antidotes were applied, and the man gradually recovered. He afterwards admitted having taken 4d. worth of strychnine, as he was in very low spirits.

Fire.

With regard to the fire at the works of the Rylands Glass and Engineering Company (Limited), Barnsley, reported in our last week's issue (page 41), the company inform us that there was no valuable machinery whatever destroyed. Only the top floor of the temporary box-factory was burnt out.

The Sale of Laudanum.

At Carnarvon on January 15, a woman named Selina Pugh was fined 10s. and costs for drunkenness. Evidence was given to the effect that the defendant was brought to the police-station suffering from the effects of drink and laudanum. The Mayor stated that it had come to his knowledge that some chemists in the town sold laudanum to women such as these on Sunday nights especially. The practice of selling laudanum, except by medical advice, was fraught with much danger, and he hoped the chemists of the town would take warning.

Irish News.

Local newspapers containing marked items of news interesting to the trade are always welcomed by the Editor.

Pharmaceutical Society of Ireland.

The following are the names of the candidates who passed at the January examinations:—

Pharmaceutical Assistants' Examination.—J. S. Strange and J. Patton. One candidate was rejected

Registered Druggist Examination.—J. Bell, E. J. Clancy, J. P. McEvoy, and D. Manson.

Pharmaceutical Licence Examination.—J. McGrotty, C. J. B. Dunlop, (W. B. Conyngham, J. P. Myles—equal), F. C. Warren, and R. Kingstone. Ten candidates were rejected.

Mr. James Guiler, Cooke Terrace, Ormeau Road, Belfast, was on January 8 appointed by the President temporary examiner in place at Dr. Meredith Rountree Whitha at the examination held on January 12. The Privy Council's approval of this was given on January 11.

Contract.

The trustees of the North Charitable Infirmary, Cork, have accepted the tender of the Cork Chemical and Drug Company for the supply of medicines for a period of twelve months.

Dance Postponed.

The committee of the Irish Pharmacists' Assistants Association has decided, owing to the sickness prevailing in Dublin, to postpone the annual dance announced for January 26.

The Killarney Medicine-contract.

The Local Government Board have replied to the Guardians of Killarney Union in reference to the medicine-contract (*C. & D.*, December 23, 1899, page 1012). As there was not a full board at the last meeting discussion was adjourned for a fortnight.

The Doctor Explains.

Dr. Crossle, late medical officer of No. 2 District Dispensary, Newry, has told the Guardians in reply to their request that he is unable to say if the cost of medicines in his district has increased. He added that his district was an exceptionally large one, and that he invariably employed the most suitable and efficient remedies irrespective of cost. The communication was considered to be satisfactory.

Dublin Oil-dues.

At the meeting of the Dublin Port and Docks Board held last week, Sir Richard Martin presiding, a letter was read from the Anglo-Caucasian Oil Company (Limited) offering payment of 200*l.* per annum for a fixed berth for their vessels, and 20*l.* per annum for wayleaves for oil-pipes. After some discussion, in which it was said that the company were paying 10*l.* a ton for oil landed in Belfast, it was decided to refer the company to the former offer of the Board, in which the price for berthing and wayleave was fixed at 300*l.* per annum.

Dispensary Seized for Rates.

At the meeting of the Ennistymon, co. Clare, Board of Guardians, the Clerk read a letter received from Dr. Peter O'Dwyer, medical officer, stating that the rate-collector had seized the Ennistymon dispensary for poor-rates due. The dispensary could not in consequence be reopened for public use for some days, and he, in the meantime, had to procure medicines and drugs for patients from the local Medical Hall. The Clerk explained that the rate-collector had asked him for the rates due, and he (the Clerk) communicated with the Local Government Board as to whether it would be legal for him to pay the amount owing. To that communication he had received no reply.

Waterford Poisoning-case.

Patrick Dunphy was, on January 13, charged at Waterford Police Court with causing the death of his two boys by poison. The younger child, aged 9, died suddenly in the street recently, and it was found that his death was due to strychnine. This caused the exhumation of the body of an elder lad, who died suddenly about a month previously, and Sir Charles Cameron is engaged in examining the stomach and intestines for poison. Mr. A. H. Parker, assistant with Messrs. Poole, druggists, Michael Street, Waterford, identified the prisoner as a person to whom he supplied, on September 26, 4 gr. of strychnine, which was wanted, prisoner said, for poisoning rats. On November 8 he again supplied him with 6 gr. to poison a dog. Mr. H. McAdams, assistant with Messrs. White & Son, druggists, O'Connell Street, Waterford, deposed that he supplied prisoner with 5 gr. of strychnine on December 12 for the purpose of poisoning a dog which prisoner said was annoying him by barking at night. The case was adjourned for eight days.

"*Good 10s. WORTH, no doubt.*"—It is thus that a leading Scotch pharmacist writes in renewing his subscription to the *C. & D.*, and he ought to know, for he adds, "I have been a reader of it since the first day it was published." (259/27.)

Scotch News.

Local newspapers containing marked items of news interesting to the trade are always welcomed by the Editor.

Medicine-mistake.

On January 11 John Ward, reader in a Glasgow newspaper office, who was suffering from a severe cough, rose from his bed in the dark and drank a quantity of poisonous liniment in mistake for cough-mixture. A mustard emetic was at once administered, but he soon afterwards lost consciousness. The medical men in attendance are, however, hopeful of his ultimate recovery.

For the Front.

Amongst the Glasgow Volunteers going to South Africa is Mr. Hugh Duff, one of the employés of Messrs. Cockburn & Co. (Limited), chemists, Glasgow. Mr. Duff is a bugler in the 4th Volunteer Battalion Scottish Rifles. Prior to his leaving their employment, Messrs. Cockburn & Co.'s staff presented Mr. Duff with a silver-mounted pipe, a tobacco-pouch, and a purse of money. The presentation was made by Mr. Henderson, in the firm's offices.

Aërated-water Bottles.

In the Court of Session, Edinburgh, an action has been raised by Daniel McInloch, trading as the Anchor Mineral Water Company, Glasgow, against the Glasgow and West of Scotland Aërated-water Manufacturers' Defence Association. Pursuer seeks delivery from defenders of 500 dozen aërated-water bottles and 100 wooden cases in the possession of defenders, which are his property, or payment of 317. 13s. 4d. The defenders say that pursuer, although not a member of the Association, had dealt with the Exchange by sending bottles belonging to other manufacturers and receiving the price per dozen fixed by defenders' rules, and by receiving from the company bottles belonging to him on payment of a price per dozen. In June last pursuer wrote demanding delivery of his bottles and boxes in their possession free of charge. They state that they are willing to treat with pursuer on the same terms as formerly, and plead that he is barred by his actings from persisting in this action.

The Late Mr. Daniel Frazer.

Referring to Glasgow's veteran pharmacist, whose death is recorded elsewhere, a correspondent mentions that Mr. Frazer, in a sketch published a few years ago, tells of the astonishment with which as a boy he saw plate-glass windows being put in the shops in Argyle Street. One of the great events of his early life was the taking of the shop 105 Buchanan Street, by his brother, Mr. H. B. Frazer, on Whit Sunday, 1830, at a rental of 35*l*. This seems a small rent now, but it was large in those days, when Glasgow had a population of only 200,000. At that time the leading shops were all east of Buchanan Street, but many of them subsequently opened in that street, though then the grass was growing luxuriantly in the upper parts of it. For six years Mr. Frazer's was the furthest west drug-shop in Glasgow north of Argyle Street. The cash sales for the first six months were as follows:—July, under 17*l*; August, 21*l*; September, 17*l*; October, 19*l*; November, 19*l*; and December, 25*l*; total, 118*l*. On only two days during the six months did the sales amount to over 27*l*, and the largest of these was 37. 9s. The smallest days were 3*s*. 6*d*., 4*s*. 4*d*., and 5*s*. 6*d*.. In 1831 the back premises were burned, and the family were taken to a then well-known hotel in Buchanan Street, which was the meeting-place of the famous Juniper Club, of which the most eminent citizens were members. It would be interesting to compare the business carried on in the one-windowed shop in Buchanan Street at 35*l*. a year, sixty years ago, with the huge dimensions which the firm has now attained, with its handsome shops in Buchanan Street, Charing Cross, Great Western Road, and Kelvin Bridge. The amount now paid annually in rent alone will probably be equal to the entire drawings of the year 1830 half-a-dozen times over, a comparison that shows with unmistakable meaning not only the business capacity of Mr. Frazer, but the vast increase that has taken place in the city of Glasgow.

French News.

(From our Paris Correspondent.)

THE INFLUENZA-EPIDEMIC is prevailing in some of the French provincial towns, and notably at Rennes. It has made its appearance in Paris also, but so far has not taken any marked development here.

BUSINESS CHANGE.—In consequence of ill health, Mr. Gaston Coutela has retired from commercial life and from the firm of G. Coutela & Co., wholesale and export druggists, Rue des Franc-Bourgeois, Paris. The remaining partner, Mr. H. Priou, F.C.S., has taken into partnership Mr. E. Ménétier, and the business will in future be carried on by them under the style of Priou & Ménétier.

THE NEW CHEMICAL INSTITUTE AT LYONS was opened a few days ago by M. Leygues, French Minister of Public Instruction. In declaring the building open he spoke of international competition, and said that, if called upon to defend the frontiers, the army would be victorious. But in the field of commerce scientific training is necessary to ensure success, and the new Chemical Institute should be the headquarters of a great movement in that direction. On the same occasion the Minister unveiled a bust of M. Jules Raulin, the founder of the Institute, formerly professor of chemistry at the Lyons Faculty of Sciences.

M. LÉON CHIRIS, Deputy from 1874 to 1882, and since that time Senator for the Alpes Maritimes, died at Paris on January 16, aged 60 years. He was the head of the firm of Antoine Chiris, manufacturer of raw products for perfumery, at Grasse. M. Chiris received part of his education at Richmond Surrey, and on his return from England joined the business established at Grasse in 1768 by a member of his father's family. Under M. Leon Chiris's management the business has considerably developed. He received the decoration of the Legion of Honour in 1869 for services rendered to the perfumery industry, and during the Paris Exhibition of 1889 was raised to the rank of Officer of the same order. He was President of the Perfumery Section on that occasion. His two daughters are married to sons of the late President Carnot.

THE INCOMPLETE PRESCRIPTION.—The pharmacist who was responsible for the dispensing of the prescription of "Gouttes amères de Baumé," which caused the death of a lady, was duly acquitted of any carelessness in the matter, as mentioned in last week's *C. & D.*, but it is of some interest to relate the examination of the assistant who actually made up the medicine. In England he would have been interrogated by the Coroner at the inquest, but here it is a magistrate known as the "Juge d'Instruction," who has the initiative. The examination took the following form:—

"You recognise, sir, that it was you who delivered the medicine in question? This preparation is a poison, and you cannot ignore the conditions and precautions required by the law in such a case."

"Yes, Monsieur le Juge, I am the dispenser. The prescription you have before you was presented to me, and as it was perfectly in order I did not hesitate to make it up, and asked no questions."

"Well, you ought to have asked for explanations. Besides, you ought not to have delivered the medicine; you have not the right to do so."

"Yet I could not refuse, as the recipe was in order, and I copied it in the prescription book in the regular way."

"In any case you are a pharmacist?"

"Pharmacist! No. I am simply a pharmacist's assistant. I was duly inscribed at a School of Pharmacy, but I have not taken my diploma. I simply follow my calling as an assistant, and have done so for over twenty years."

"As you are not a pharmacist you ought not to have delivered this poison. You are consequently culpable of illegal practice of pharmacy. You are liable to a fine, the maximum of which is 3,000*f*, and to two months' imprisonment."

Needless to say, the assistant was somewhat terrorised by the tone of his interlocutor, who was right according to the strict letter of the law. The text distinctly lays down that none but the qualified pharmacist who owns the business can prepare and sell medicines. The authorities allow considerable latitude, action only being taken against qualified pharmacists who allow their name to be used by an unqualified owner.

Colonial and Foreign News.

NEW GERMAN PHARMACOPOEIA.—The new Pharmacopœia will probably not appear until October next.

WE LEARN FROM THE RIVIERA that Britishers are swarming into Bordighera and San Remo, on the Italian coast, and that some of the proprietors of villas there are giving their delightful abodes as convalescent homes for wounded British officers, whereas, on the French side, the season is very dull, and many of the regular visitors are absent.

TRADE-MARKS IN GERMANY.—The Imperial German Patent Office has declared the following words as "free names," i.e., they may not be registered:—Bon Marché, Brilliant, Elite, Excellent, Finesse, Garantie, Hermosa, Ideal, Normal, Nova, Nuova, Perfect, Perfection, Pompons, Reform, Spar (= saving), Special, Splendid, Standard, Style, System, Universal.

RUSSIAN PHARMACISTS are now holding a conference at Moscow, and Mr. Popovsky, who has a fine pharmacy at Odessa, and the largest business in South Russia, has been collecting details of matters pharmaceutical in the chief countries of Europe for the paper he is going to read at the meeting, having in view the advancement of Russian pharmaceutical education. He is of opinion that, notwithstanding the keen competition, affairs in England compare favourably with those on the Continent.

GERMAN CHEMICAL SOCIETY.—At the recent annual meeting of this Society, Lord Rayleigh, Professor Ramsay, Dr. Hittorf, and M. Moissan, were elected honorary members. The new President of the Society is Dr. J. Volhard, and the Vice-Presidents are Drs. Lietermann, Ostwald, Emil Fischer, and Engler. Industrial chemistry is well represented on the council by Drs. Haarmann, Fahlberg, and Knorr. The total number of members is now 3,347, a figure never before reached.

TARIFF DECISIONS.—According to recent decisions given by the New Zealand Commissioner of Trade and Customs, the import-duties on the following articles have been interpreted as under:—

Glycerin wash for horses, cattle, sheep, dogs, &c.; as insecticides, or sheep-dip	... ...	Free
Horse-balls, Gabriel & Troke's gelatin capsules; as proprietary medicines	... ...	40%
"Kasagra," an extract of cascara sagrada, aromatic, prepared by Stearns; as druggists' sundries	... ... ...	20%
Pleasant worm-syrup, prepared by Stearns; as druggists' sundries	... ... ...	20%
Prussiate of potash; as chemicals, n.o.e.	... ...	20%
Soothing-syrup, baby's, prepared by Stearns; as druggists' sundries	... ... ...	20%

NEW YORK CHEMISTS' CLUB.—This Club, which was organised about a year ago, has caught on. It has now 132 resident members, and is domiciled in a handsome house in Manhattan Borough. The objects of the Club are "the promotion of good fellowship amongst its members and the advancement of the science and application of chemistry." The first year has been more or less experimental, but its success has encouraged the founders to extend the usefulness of the Club, and a plan has been put forward to establish a chemical library in connection with it. A nucleus is present in the library of the American Chemical Society (which had been for several years in storage, and practically useless to chemists) and the Club's present library. The arranging of this combined library and the preparation of a catalogue are well under weigh. It is proposed further to inaugurate a system by which competent chemists can be engaged to send to members of the Society living at a distance abstracts, copies, or translations of chemical literature from the material to be found in the library or elsewhere in New York. A directory of all the chemists living in the United States or Canada is also being prepared, and will be useful for reference. The President of the Club (Dr. C. F. Chandler) has issued a circular in which he appeals to the chemists of the United States and Canada to support the Club and help to extend its benefits.

East Indian News.

CHEAP QUININE.—The director of the General Cinchona Plantations has reduced the price of quinine in 5-gr. packets from 3 piec to 2 piec.

MORPHINE IN BURMA.—The importation of morphine, which, in the form of morphine pills, is used as a substitute for opium, is mentioned in the Burmese Excise Administration Report for 1898-99. The report claims that the sale of morphine has been checked by the Excise Department in Rangoon and Mandalay; this, however, is questioned by the Lieutenant-Governor. In 1897 the chemical examiner reported that twenty-nine articles examined by him contained morphine, and that these articles came not only from Arakan, where the importation had hitherto been noticed, but from Pegu Irrawaddy. The chemical examiner, in his report for 1898, says: "Detected morphine in fifty-one articles examined. The use of these pills has now extended throughout Lower Burma and to Mandalay. Those consumed in the Arakan division were usually made locally, while those used elsewhere in Burma were apparently of Chinese manufacture." It is stated that the imports of morphine as a substitute for opium have rapidly increased in recent years at several Chinese ports. The spread of the morphine-habit is attributed to the stringent administration of the Opium Act, as, although the sale of morphine has been declared to be penal under that Act, an offence of this kind more easily escapes detection.

Trade Notes.

MESSRS. DAISY (LIMITED) inform us that they have just purchased two enormous printing-machines which will print 20,000 copies of a 64-page pamphlet every hour. The machines automatically feed themselves with paper from a huge reel, cut off each pamphlet, fold it, and throw them out in a continuous stream counted ready into bundles.

MESSRS. STEPHEN PITTIFER & SONS, Crudwell Chemical Works, Malmesbury, Wilts, inform us that they have duly protected their right to the exclusive use of the word "Santovin" as an additional name for "Herbal Tonic" or "Flockmaster's Friend," which is largely used for lambs in the spring and summer months. The title "Santovin" will in future appear on all labels and wrappers.

THERMOGENE is a medicated wadding prepared by Messrs. Vandenbroeck & Co., pharmacists, Brussels. It is put forward as a substitute for mustard plasters, iodine, and blisters in the treatment of rheumatism, neuralgia, and chest-affections. The advantages claimed for thermogene are that it cannot blister the skin, and that it does not contain poisonous substances. To use it all that is required is to fasten the wadding on the part by means of a bandage, so as to bring it into immediate contact with the skin. The feeling of heat which ensues can be hastened or increased by moistening the skin, and also by placing a piece of rubber on the top of the wadding. Thermogene sells at 1s. 1½d. per packet. The wholesale agents for Great Britain and the colonies are Messrs. Fassett & Johnson, 31 and 32 Snow Hill E.C.

PROFITS ON RETURNS.—The Lamson - Paragon Supply Company (Limited), Paragon Works, Canning Town, E., send us a little book they publish called "Profits on Returns." The book gives methods of determining profits on returns, and tables ready worked out showing the amount of profit realised from 1d. to 10l., and from 5 to 50 per cent. The other interesting items in the book are a method of calculating discounts, a ready way of calculating eightths and sixteenths, interest for less than a year, relative prices of ounces, pounds, hundredweights, and tons, an expenditure-table, and note on bankers' system of discounting bills. Incidentally, the fallacy that 100 per cent. profit can be obtained upon returns is exposed. The book is published at 1s. 6d., but the Lamson Supply Company offer to supply it to any chemist who applies for it and remits 9d. It is distinctly useful to chemists who appreciate the business side of their calling.

War Notes.



BY THE QUEEN.

A Proclamation.

VICTORIA R.

Whereas by "The Customs and Inland Revenue Act, 1879," Section 8, certain goods may, by Proclamation or Order in Council, be prohibited either to be exported or carried coastwise: And whereas We, by and with the advice of Our Privy Council, deem it expedient and necessary to prohibit the goods hereinafter mentioned to be exported or carried coastwise; We, by and with the advice aforesaid, do hereby order and direct that from and after the date hereof, the following goods, being articles which We have judged capable of being converted into or made useful in increasing the quantity of Military Stores, that is to say:—

Pieric Acid (Trinitro-phenol),
Trinitro-cresol,
Carbolic Acid (Phenol),
Cresylic Acid (Cresol),

shall be, and the same are hereby, prohibited either to be exported from the United Kingdom or carried coastwise.

Given at Our Court at Osborne House, Isle of Wight, this Eleventh day of January, in the Year of Our Lord One thousand nine hundred, and in the Sixty-third Year of Our Reign.

God Save the Queen.

A CURIOSITY.—From a subscriber in Bloemfontein, O.F.S., we have received a postcard dated October 12, 1899. It travelled by way of Pretoria, which it reached on October 19, and was delivered to us on January 17, 1900.

MESSRS. FUERST BROTHERS, 17 Philpot Lane, E.C., inform us that they have ready cinematograph-films, taken at Southampton on January 13, of the departure of the City of London Imperial Volunteers.

C.I.V. EQUIPMENT.—In looking through the equipments of the City of London Imperial Volunteers we noticed that each man was provided with two cakes of Pears' soap and a tin of vaseline dubbin. The dubbin is for the boots and feet and for greasing the metal parts of the rifles. The soap was presented by Messrs. A. & F. Pears (Limited), and the dubbin by the Chesebrough Manufacturing Company.

MR. A. F. GURNEY, chemist's assistant, whose portrait we give, was one of those killed in the desperate attempt to

take a Boer fortified position outside Mafeking. Mr. Gurney was the eldest son of the Rev. J. L. Gurney, Vicar of Bierton, near Aylesbury, formerly an old Blue, and was a trooper in the Protektorate Regiment. He was 28 years old this month, and had been three years in Cape Town. In the sortie in which Mr. Gurney met his death a small body of 100 men attempted to take a strongly-fortified Boer fort. They forced their way right up to the ditch around the fort, but were unable to

take it, and, after losing more than half their number, they were obliged to retire.

COMPOUNDERS AT SEA.—Last week our correspondent detailed his experiences up to the time of his embarkation at Southampton. This week we receive a further communication from Teneriffe. Taking up the tale he says:—At Southampton, tea and pastry were supplied through the kindness of the proprietors of the *Daily Mail*, and at the



quay we had to separate our ordinary kit from our sea kit the former being put into the hold. Our helmets, swords, and valises were taken into a store-room full of racks. Before leaving, the band of the Lincolns struck up the usual patriotic programme, finishing with "Auld Lang Syne" and "God Save the Queen." We got a magnificent send-off. Our mess-room, which is also our sleeping-compartment, has 320 men in it, divided into messes of fourteen to sixteen men. About 3 feet or so from the roof our hammocks are hung very close together, and each man receives two blankets. Lights out at 8.30 p.m. and rise at 6.30 a.m. On crossing the Bay of Biscay the ship pitched a little, and a great number on board (including myself) were sick. The medicine-chest on board does not seem to be overstocked. There is neither potas, permang, nor ac. borie. Our first place of call is Teneriffe, after leaving which the doctors will start inoculating us for enteric fever. This inoculation is voluntary, but all the four dispensers on board intend to try it. On Sunday there was a magnificent sunrise, and the porpoises bobbing about formed a great source of amusement to the men on board. In the afternoon the regimental band of the Lincolns discoursed saered music. There was no service held on board on Sunday. This forenoon (January 7) we had a lecture given us on ambulance-work, with the usual practical demonstrations. The dispensers who are on board are quite prepared to rough it with any of the privates though it is a little more than they bargained for. We have not had any dispensing to do yet, but expect our duties will start proper when the inoculation commences. The passage so far has been very comfortable.

MR. C. H. HOBSON, one of the Volunteer-compounders, has written to Mr. A. Harburn, chemist, Bishop Auckland, with whom he was apprenticed, in regard to his equipment. He says:—

Each dispenser, when fully equipped, has quite a cartload of stuff. There are three blue-serge uniforms, one with and one without red braid, besides the khaki turnout, one forage-cap, pill-box-cap, and the khaki helmet. We have to carry knapsacks, containing shirts, socks, overcoat, razor, brushes, knife and fork, comb, spoon, and many other necessary articles. And (would you believe it?) we each carry a sword. There is no mistake [concludes Mr. Hobson] that when fully dressed in our regiments we are "Soldiers of the Queen."

Business Changes.

Notices are inserted free in this section if properly authenticated.

MR. A. OLIVER, chemist and druggist, has taken over the business lately carried on by Mr. W. H. Johnson at 65 Tatton Street, Salford.

MR. JOSEPH ROBERTS, chemist and druggist, Newcastle-on Tyne, has purchased the business of the late Mr. Robert Sheel, Low Fell, Gateshead.

MR. THOS. VICKERMAN (not Wiekerman, as stated in our issue of December 23, 1899, page 1034) has taken over the business of Messrs. J. & J. Clemishaw, of Bury.

MR. EDMUND H. HAMILTON, chemist, has opened a new pharmaeuy on the Queen's Parade, Hamlet Court Road, Westcliff-on-Sea, a new suburb of Southend-on-Sea.

MR. E. YOULDON, 36 Great Garden Street, E., has taken over the business of Messrs. Ballard & Co., East London Glass-works, 2 Minerva Street, Hackney Road, whieh he will carry on in conjunction with his present business.

NATURE'S MESSAGE.—"All glorious nature glows with life and braeing are the breezes, while roeks and hills their message bear of eures or all diseases. Down by the shore the grim, grey cliffs stand firm above the billow, and tell a wondering world the worth of 'Karma-Sarsaparillo.' Now Autumn has her paint-box out and daubs the billowy hills, and gorgeons foliage now surrounds the words: 'Take Pinkem's Pills.' The orehards stand with yellow fruit beneath high heaven's blue vault, and laden boughs caress the sign: 'Try Seidlitz Seltzer Salt'"—*Boston Advertiser*.

Festivities.

ALDERSGATE CRICKETERS' SMOKER.

The annual smoking-concert of the Aldersgate Cricket Club (Messrs. S. Maw, Son & Thompson) took place at the Champion Hotel, Aldersgate Street, E.C., on January 12, Mr. R. W. Carter in the chair. There was a large and enthusiastic audience, the Chairman being supported by Mr. Mowbray Trentham Maw, Mr. T. C. W. Martin, and others, while Mr. C. W. Martin occupied the vice-chair. At the commencement of the proceedings the Chairman, proposed the toast of "The Queen," in a loyal speech which tapped the patriotic feelings of the audience. The entertainment was of a high character throughout. Mr. Arthur Wood, a very fine tenor, sang "The Soldier's Grave," and, as an encore, the new ballad, "Bring them Back in Triumph from the War." Mr. Felix Hothkiss gave "The Young Royalist" and "Who Carries the Gun?" and collaborated with Mr. Wood in a warlike duet called "The Battle Eve." Mr. R. Ballantyne, one of the firm's employés and the possessor of a fine bass voice, contributed "The Deathless Army," and a selection of cornet-solos was given by Mr. George Harlow. The humorous element was in the capable hands of Mr. Will Webster and Mr. W. H. Noel, who told with appropriate solemnity of a cricket-match which was prolonged to an indefinite period. The accompaniments were ably played by Mr. Arthur Baker. In the course of the evening the Vice-Chairman proposed "The Aldersgate Cricket Club," congratulating them upon their successful record during the year and hoping for greater things to come. Mr. Thomas Masters, replying, alluded first to the great kindness shown to him during his serious illness of the past year by the members of the firm. With regard to the Club, 1899, he said, had been their record year. They had played eighteen matches and won thirteen. They had made 1,874 runs, and had won the cup for the year, and now went into the senior division, where they intended to do as well as they had done in the junior. As for the prize-winners, their Captain (Mr. Mowbray Trentham Maw) had won the first in batting; Mr. Jones, second. In bowling, the Captain again came first, and Mr. Clegg second. The prize for scores over fifty were nine in number. Of these, Captain Maw took four; the others were taken by Messrs. Jones, Heritage, Lawrence, and Clegg. Out of the six prizes won by the Captain, he could only be prevailed upon to accept one, which was for a score of 71. Mr. Masters then spoke of their indebtedness to Mr. M. T. Maw, who was not only present on match-days, but also on practice-nights, and through whose good offices the Club held such a high position. He next alluded to the handsome way in which the firm supported the Club. The annual visit to Nutfield was always appreciated by them, and Mr. Maw, sen., had this year placed them under greater obligation than ever by cheerfully paying an extra 5*l.* a year rental which was demanded for the practice-ground. Mr. Masters also specially referred to the annual prize which Mr. A. Walsh (Eschmann Brothers & Walsh) had contributed to the Club for the last ten years, and which he was glad to think he would give for at least another ten. The prizes were then presented by the Chairman, after which he proposed "The President and Vice-President of the Aldersgate Cricket Club" (including Mr. Charles Trentham Maw, Mr. Mowbray Maw, and Dr. Maw). It is about fifteen years ago, he said, since Mr. Charles Trentham Maw joined the forces. Since then there have been many recruits; but veterans and recruits alike were delighted to see him treading so successfully in the footsteps of his honoured father. He was keen and alert in business, but kind and courteous to all. Mr. Mowbray Trentham Maw, in reply, said it was the greatest pleasure of his life to play cricket with the Club. With regard to his father's support of the Club and the raised rent, he happened to be with him at Eastbourne when the news came. What he said then reminded him of the story about the little boy who ate a rather unwholesome pudding and wanted a second helping. His mother told him that if he took any more he would have to take pills. He considered for a moment, and then he said: "Well, mother, I think it's worth it." In the same manner Mr. Maw thought the advantages to the members of the firm were quite worth the

extra expense. A bottle of chauapagne was then emptied into the cup, and (at Captain Maw's suggestion) the whole of the members of the Club present repaired to the platform and "christened the cup."

ARBROATH ASSISTANTS JOYFUL.

The annual supper of the Arbroath Chemists' Assistants' and Apprentices' Association was held in the White Hart Hall on January 9, Mr. F. W. M. Bennet (President) in the chair. After supper "The Queen and Royal Family," "The Army and Navy," and "The Pharmaceutical Society" were toasted, Mr. Naysmith replying for the latter. Mr. James Ruxton gave "The Medical Profession," and Dr. W. Dewar replied. "The Association" was given by Dr. Gilruth, and replied to by the Chairman. The remainder of the evening was pleasantly spent with songs, recitations, and pianoforte selections.

CHEMISTS' ASSISTANTS' ASSOCIATION.

A quiet little social and musical evening was spent at the rooms of the Association, 73 Newman Street, on Thursday, January 11. The attendance was comparatively small, and one cannot help speculating as to the reasons why this society should not be better supported even on its festive evenings. The proceedings were enjoyable and informal. Mr. Blissom (an old favourite) contributed the "King's Own," and, in lighter vein, "Oh, Lucky Jim," "The Plumber" following as an encore. Mr. Marcus, in fine voice, contributed "Tommy Atkins" and "A Jovial Monk" ("La Poupee"). Mr. Latreille, the genial Secretary, sang "The Soldier's Song" excellently, and, responding to the general wish for more, gave "Mandalay." Mr. Morley Taylor made a decided hit with Bret Harte's "Dow's Flat," and a second characteristic little piece which remained unnamed. Mr. Strother also induced the company to join him in chorussing a little ditty of Bristol City, the title of which he did not know. Mr. Ellis presided at the piano, and he and Mr. Blinn gave an effective rendering of "Excelsior" towards the end of the evening.

FYLDE CHEMISTS DINE AND COMBINE.

Business and pleasure were united in an eminently successful manner on January 10 at a dinner held at the Palatine Hotel, Blackpool, by the chemists of Blackpool and district. The chair was occupied by Mr. T. Carter, and Councillor J. Laurie was in the vice-chair. After the usual loyal toasts had been disposed of, "The Pharmaceutical Society" was proposed by the Vice-Chairman, who spoke of the necessity for an association of chemists for the Fylde. Nothing could be done, he said, without union, and if they wanted anything from Parliament they must combine. There would be difficulty in preventing limited-liability companies carrying on the business of chemists and druggists, but he thought they ought only to be allowed to do so if the name and qualification of the person responsible were on the label. With regard to the formation of an association, he advised that it should be done under the auspices of the Blackpool Tradesmen's Association. Local chemists had taken an important part in the inception and support of the latter, and there were four local chemists already on its Executive Council.

Mr. Taylor (St. Anne's), supporting the toast, said his experience was that in many cases the Pharmaceutical Society had no means of knowing what the trade wanted. He strongly supported the formation of an association for the district, so that the collective opinion on vital questions might be known. Company-trading was the question of the hour, and the position of the chemist was a very peculiar one. He was a professional man, and the titles Ph.C. and M.P.S. were as much degrees as M.D. No company could be an M.A. or Mus. Doe., therefore no company could be a chemist and druggist. But a chemist was also a tradesman, and as tradesmen must meet competition, and if their predecessors had only taken the necessary steps thirty years ago the trade would not have been in the position it is to-day. He believed advancement must be made in a personal direction. They should start with the apprentice and the Preliminary examination. There should be an entrance-fee to raise the social standard of the candidate, as is done in other professions, and they should be more particular as to the stamp of young men they admitted as apprentices.

Mr. W. C. Richardson considered that the facilities for a high-class technical training for the youths committed to their charge were not what they might be. The Technical Instruction Committee provided classes in pure science, but classes in pharmacy were awaiting, and he thought an association would provide the necessary machinery.

Mr. Ashton, Mr. Buckley, and several others expressed views in favour of the association idea, and a resolution was unanimously adopted that steps be taken to form such an association; Mr. C. H. Turver being appointed hon. secretary *pro tem.*

Mr. C. H. Turver (Local Secretary) replied on behalf of the Society. Blackpool, he said, stood very well in reference to the P.A.T.A., nearly all the members of the craft in the town being subscribers, and he hoped to have every chemist in the district associated with it before long. An association such as they had resolved upon was a *sine qua non*, as it had been a reflection on the intelligence of local chemists that they were not a more closely united body.

BRADFORD MUSICAL.

On January 16, Mr. Hanson and a party of friends of the Bradford and District Chemists' Association gave a musical evening in the County Restaurant. There was a fair attendance, and a very enjoyable time was spent.

THE CHEMISTS' BALL.

The thirty-fourth annual chemists' ball came off at the Portman Rooms, W., on Wednesday, January 17. If not fully up to the average in point of numbers, the dancers present amply occupied the larger Portman Room, and left little to be desired in the matter of assiduity. At the supper, which is an integral—indeed, an indispensable—part of the entertainment, Mr. W. Martindale, who presided, in stentorian tones proposed the success of "The Chemists' Ball," and "The Ladies," a toast which was enthusiastically received. It was responded to by Mr. W. Warren, the Secretary, long since known in pharmaceutical circles as "the confirmed bachelor." In a humorous speech, Mr. Warren pointed out that his celibacy had been tacitly condoned by the ladies, who had not formulated any objection to his once again replying on their behalf. Alluding to the remarks made by a lady guest, that chemists usually look sad, he remarked that if chemists had not this annual "refreshment" to look forward to the sadness would certainly be accentuated. He concluded by observing that in the century to come ladies would have the privilege of speaking for themselves, but he could defy them to find a more ardent admirer and defender of the sex than he. The company then returned with renewed zest to the giddy floor, where, as far as one could judge, they derived unlimited satisfaction until the band, with Dan Godfrey, jun., at their head, dropped with fatigue. The invaluable services rendered by Mr. Warren, as Secretary, were generally acknowledged, and the hope was expressed that he would continue to exert his organising powers in this direction.

DUTY ON QUICKSILVER IN ITALY.—There are several quicksilver-mines in Tuscany, and two in Upper Italy, but these latter have not been worked for some years. Perhaps the present high prices will ensure their renewed activity. There is an import-duty of 10*l.* on quicksilver, which is really a royalty to the three mine-owners, and cripples the development of the trade in Italy. In order to incite a spirit of enterprise, the State Director, on the conclusion of the last commercial treaties, placed higher import-duties on quicksilver and its combinations—30*f.* on that used for manufacturing-purposes, 80*f.* on cinnabar, 100*f.* on mercurial preparations. By these means the State Directors brought about the desired result to some extent. Subsequently small undertakings sprang into life near Genoa for the production of mercurial preparations mixed with colours, for painting ships-bottoms to prevent the attachment of shell-fish. One of these factories is still working. The Holzapfel Factory have also works in this neighbourhood. Mercurial preparations are produced in large quantities at factories in Milan and Florence, one of which also manufactures cinnabar.

Legal Reports.

Pharmacy Act.

THE LIABILITY OF AGENTS FOR POISONS.

BEFORE Mr. Justice Grantham and Mr. Justice Channell, sitting as a Divisional Court in the Queen's Bench Division, on Tuesday, January 16, the case of the Pharmaceutical Society *v.* White, was heard. This was an appeal from a decision of the County Court Judge at Worcester in an action brought to recover a penalty under Section 15 of the Pharmacy Act, 1868.

Mr. Crump, Q.C. (for the plaintiff Society), stated that the County Court Judge held that defendant was not guilty of keeping open shop for the sale of poisons, and decided in his favour. The respondent White was a florist carrying on business at Worcester, and sold a weed-killer containing arsenic, which was one of the poisons mentioned in the schedule to the Pharmacy Act. Mr. White admitted that he sold the weed-killer, but submitted that he was simply acting as agent to the Boundary Chemical Company, of Liverpool. He took orders for the weed-killer, sold in gallons at 6*s.* 6*d.* per gallon and in tins at 1*s.* 6*d.* each. He received the money, and gave receipts on billheads upon which appeared the name of the chemical company at Liverpool. He did not keep the poison in stock. He sent the order to the Liverpool company to execute, and they delivered the weed-killer to the person who purchased it from Mr. White, who received 25 per cent. of the price as commission. The County Court Judge endeavoured to find on a fact what was a matter of law as to the relationship of Mr. White to the Boundary Chemical Company, and found that Mr. White was not the seller, but an agent of the company. Consequently he was not the person within the section at all. Counsel contended that White was as plainly as possible the seller of this poison. The object of the Act was the protection of the public. Questions had been raised as to whether a limited company was within the section, and the House of Lords had decided that it was not. So that if the person who kept the shop, and took orders and caused the poison to be delivered, was not the seller within the meaning of the Act, the public were without any remedy.

Mr. Justice Grantham: It is not the first time that an Act of Parliament has failed to carry out its objects. This man is not the seller. He is an agent acting for the seller.

Mr. Crump submitted that he kept a shop for the purpose of retailing the weed-killer.

Mr. Justice Grantham: No, he does not. He keeps a shop for selling flowers.

Mr. Crump said he kept a shop, and chose to import into his business the business of selling poison. The Boundary Company did nothing but send out goods on order. They had nothing to do with the sale. The "unqualified" person not registered under the Act, who conducted the sale of poison in his shop was liable, though he had no poison at the time on his premises. He made the contract to sell.

Without calling on the opposing counsel the Court upheld the decision of the County Court Judge. Mr. Justice Grantham said he had no doubt the Judge was right. The defendant, knowing what was useful for killing weeds, advised people where to get it. He arranged with the people who were the sellers. He was provided with billheads of the Liverpool firm, who gave receipts of money paid to him on their account, and he was entitled to a certain commission. He was not the person conducting the sale. He was simply introducing one person to another.

Mr. Justice Channell concurred, and the appeal was dismissed with costs. Leave was given to appeal.

SALE OF LAUDANUM BY UNQUALIFIED ASSISTANTS.

The Pharmaceutical Society of Great Britain were the plaintiffs in two cases under the Pharmacy Act which came before Judge Whitchorne at Birmingham County Court on Monday, January 15. In the first they sought to recover a penalty of 5*l.* from Ernest Freeman, a chemist's assistant, of High Street, King's Heath. Mr. Arthur Smith, solicitor, who appeared for the Society, stated that on September 29, 1889, a Mrs. Painter, wife of a former detective of the

Birmingham police force, visited the shop at King's Heath, acting under the directions of the Society, and purchased from defendant twopennyworth of laudanum. Mr. E. J. Eastes, F.I.C., to whom the bottle and contents were handed for analysis, found that it contained 3 fl. dr. of laudanum.

Mr. Cochrane, solicitor, appeared on behalf of the defendant, and of his father and brother, both of whom were members of the Pharmaceutical Society and properly-registered chemists. They complained that the Society, instead of prosecuting people who were opposed to its interests, adopted a system of "sniping." They picked out cases where possibly a slip had been made, but which were not aimed at for a moment by the Act of Parliament. The proprietor of the shop (Mr. John Freeman) was a registered chemist, so was also his son William, his assistant at this and other shops. The defendant (Ernest Freeman) was unregistered. The largest part of the business at the shop was the sale of drugs not included in the Act: the sale of poisons was a very small part of the trade, and it was obviously impossible in a shop like that to keep a properly-qualified chemist behind the counter every minute of the time the shop was open. The present defendant had been strictly forbidden to sell poisons. Mr. Cochrane also complained that his client had been brought into court three months after the event. They got no intimation that anything was wrong until November 9, and he complained that this was not a fair way for a Society entrusted with the administration of an Act of Parliament to conduct its business.

Ernest Freeman, the defendant, was then called, and declared that he was not at the King's Heath shop on September 29, neither had he ever seen the witness Painter. In cross-examination he admitted that he had twice failed to pass the Preliminary examination. His brother, William Freeman, who is a member of the Pharmaceutical Society, declared, on the other hand, that he was at the shop the whole of the day on September 29.

The question thereupon resolved itself into one of identity, and the Judge said he had come to the conclusion that the Society, which had acted simply in its public capacity, had not proved its case. He therefore gave judgment for the defendant, but without costs.

In the second case the defendant was Charles Mottram, and the ground of claim was that he, being an unregistered chemist, sold a quantity of laudanum in a shop at Six Ways belonging to Mr. Freeman. The defendant, Mr. Cochrane pointed out, was an infant, and under the County Court Rules a solicitor could not act for him without the instructions of a guardian. To meet the difficulty the Judge appointed the Registrar as guardian. No evidence was forthcoming for the defence, and a question arose as to whether the Society should have their costs. Mr. Smith, while pressing for costs, undertook that any order would not be unduly enforced. His Honour accordingly granted costs, laughingly observing that he would record, for the Registrar's safety, that the plaintiff's solicitor undertook not to enforce the order against the guardian.

High Court Cases.

ARTIFICIAL MUSK.

In the Companies Winding-up Court of the Chancery Division of the High Court on January 11, before Mr. Justice Wright, the petition of Mr. A. Addison for the compulsory winding-up of the Anglo-Colonial Chemical Company came on for hearing. Mr. Peterson, for the petitioner, said that the only way of getting at the vendors of the patents was to have a winding-up order, so as to compel them to disgorge the profits which they had received. They had sold something which was useless, and he asked that the company should be wound up in order that the shareholders should be able to maintain their rights. The vendors had received £40,000 for worthless patents. He read his affidavits.

Mr. H. Reed, Q.C., argued that the company could still be carried on with success;

His Lordship said the company was formed to obtain profit by the manufacture of artificial musk, and on the facts before him he was not able to say that it was not going on on the same lines as were set out in the prospectus. The time might come when the processes might be found workable, or their contracts might be prolonged, or other

contracts might come into existence which might enable the company to secure profit from the artificial processes. He could not see that the substratum of the company had gone, and he dismissed the petition, with costs.

FROST v. VAN OPPEN.

THIS case was heard by Mr. Justice Lawrence in the Queen's Bench Division on January 13. It was a claim for a balance of £47. 5s., due from the defendants (who were agents for perfumery) to the plaintiff. J. C. Frost, the lessee of premises at 18 and 20 Cheapside, Mr. Wildey Wright, for plaintiff, said defendants took an office in the building in February, 1897, for three months, but agreed afterwards to an annual tenancy. Mr. Yelverton, for the defendants, denied the extension of time. Mr. Claude van Oppen was authorised to take the office for three months. After that Mr. Claude van Oppen made use of the office and carried on an agency on his own account without the knowledge of the partners. His Lordship said he did not believe the story of the defendants nor of their agent, and gave judgment for the full amount.

SACCHARIN.

In the Chancery Division of the High Court of Justice on Tuesday (January 16), Mr. Justice Cozens-Hardy had before him an action brought by the Saccharin Corporation (Limited) against Bratby & Hinckliffe (Limited), and Mr. Bratby, of Ashfield-in-Hale, Howden, Cheshire. The action had reference to the importation of saccharin into the United Kingdom. Mr. J. C. Graham, for the plaintiffs, informed his Lordship that the defendants consented to judgment being entered for the plaintiffs on terms which had been agreed upon. Lord Robert Cecil, for the defendants, assented, and his Lordship gave judgment for the plaintiffs accordingly.

Sale of Food and Drugs Acts.

CAMPHORATED OIL.

At Caerleon on January 11, G. F. Thorne, grocer, Newport-on-Usk, was summoned for having sold camphorated oil which was alleged to be deficient in camphor. The case was heard at Cwmbran some time ago, and judgment was reserved to give the Court an opportunity of considering their decision, it having been alleged that the certificate did not give the necessary particulars in accordance with the Act. It was now stated that the Bench had come to the conclusion that the prosecution had failed to make out their case, and they ordered the prosecutors to pay 4s. 6d., the Court costs, and two guineas towards the solicitor's fees. They were prepared to state a case for the opinion of a higher Court in the event of an appeal being lodged.

SWEET SPIRIT OF NITRE.

MR. WILLIAM SWIFT, pharmaceutical chemist, of 33 Chatsworth Road, Hackney, was on January 12 summoned before Mr. D'Eyncourt, at North London Police Court, for selling sweet spirit of nitre deficient to the extent of 33 per cent. of ethyl nitrite. The inspector who gave evidence of purchase said the sample was in his possession about eighteen hours before going to the analyst. The bottles into which the samples were divided were large, but were fitted with fairly good corks. Mr. Leo Taylor, public analyst, said there would be practically no alteration in the sweet spirit of nitre in that size bottle in the few hours that intervened between the purchase and the analysis. It was well corked. The spirit was exceedingly volatile, and would evaporate more quickly from a large bottle. On the same day that he received the sample he bought another sample to test the evaporation. He analysed both samples at the same time, and again the next day, and there was barely 1 per cent. deficiency in the active principle.

Defendant said he objected to the size of the bottles in which the inspector put the parts, because they were so large. He always bought best-quality sweet spirit of nitre, and only in 10-oz. bottles. He thought there was only a difference of 3 per cent. between his sample and the B.P. requirements, due to evaporation between the taking of the sample and the analysis. He called the Magistrate's attention to the loose manner in which the bottles had been corked, but Mr. D'Eyncourt thought they were very good

corks. Defendant pointed out that the cork was saturated with the spirit, and in that state, he said, the contents of the bottle would be useless for an independent analysis. However, he did not dispute the analysis, and the Magistrate thought it would certainly be desirable in such cases to have the bottle of a size to prevent undue evaporation. The inspector ought to provide himself with more suitable bottles. [The bottles used would hold about six times as much as was in them.]

Mr. Ward, manufacturing chemist, of Whitecross Street, said he sold the sweet nitre to defendant, and it invariably went out of full strength and with an allowance of $\frac{1}{2}$ per cent. for evaporation. He could not account for this being 33 per cent. below the minimum, except that the sample-bottle was not a fair one.

Mr. D'Eyncourt said he realised that it was an exceedingly difficult thing to serve this article in perfect condition, and in this case the defendant acted perfectly *bond-fide* in getting good stuff; but he did not take the proper precautions to cope with the volatile spirit. The only method that suggested itself to his (the Magistrate's) mind was to employ smaller bottles. A penalty was imposed of 20s. and 12s. 6d. costs.

BORACIC ACID IN MILK.

MR. LANE, Q.C., the Magistrate at the South-Western Metropolitan Police Court on January 12, in pursuance to a *mandamus* granted by the Court of Queen's Bench, renewed the hearing of a summons against a milk-seller who sold milk which contained boracic acid. At the previous hearing Mr. Lane declined to give a decision, for the reason that eminent scientists were divided in the opinion as to whether or not boracic acid was an ingredient injurious to the purity of milk. Now, after a legal argument, Mr. Lane thought the evidence was too slight and indecisive to allow him to convict the defendant, but as he had been required to give a decision he dismissed the summons without costs.

LIME-WATER.

AT Stratford Police Court on January 6, Henry W. Denny, described as a chemist, but not on the register of chemists and druggists for 1899, was charged with selling limewater deficient in lime. The public analyst's certificate stated that

On evaporation and ignition the sample contained 0.034 gr. of inorganic residue per fl. oz., composed of chlorides, sulphates, and carbonates. According to the British Pharmacopoeia, genuine limewater should contain about $\frac{1}{2}$ gr. of hydrate of lime per fl. oz.

Defendant pleaded guilty, and was fined 1s. and 19s. 6d. costs.

County Court Case.

A BUSINESS-PURCHASE.

AT Marylebone County Court on January 15, John Llewellyn Rowland, chemist and druggist, 17 Sussex Place, Queen's Gate, W., sought to recover 48l. 15s. 1d. from Arthur John Sarson, chemist and druggist, 33 High Road, Willesden Green, N.W., an amount stated by him to be due under an agreement by which plaintiff sold to the defendant a business at 9 Station Road, Willesden Green. Defendant counterclaimed 49l. 19s., for return of money stated to have been overpaid by him owing to misrepresentations as to plaintiff's book-debts. Defendant admitted the amount of the claim, and said that an agreement was entered into by which the defendant purchased the goodwill, stock-in-trade, furniture, fittings, &c., together with book-debts of the business, for 900l. There was no dispute about anything but the book-debts, which were stated by a Mr. Green who transacted the sale to amount to 170l. or 180l. Prior to purchase defendant had asked to see plaintiff's books, but owing to their not being made up it was impossible to ascertain the amount of the debts. Upon taking over the business and examining the books defendant found that the debts only amounted to 108l. 13s. 8d., which amount was, however, subsequently reduced by 16l. 2s. 8d., made up by some forty small accounts said to have been paid to the plaintiff either in cash or by contra-accounts. Defendant in his evidence said emphatically that Mr. Green in the presence of the plaintiff represented the book-debts at 170l. or

180l., Mr. Rowland making no remark on the point. His statements were backed up by the landlord of the premises and defendant's solicitor, who were present at the sale. Mr. William N. Green, accountant, Walbrook, E.C., in support of the plaintiff's case, said he had no interest in the matter and insisted that he made no definite representation of the amount of the book-debts. He explained to the defendant that the books had not been well kept, but as far as he could ascertain the accounts sent out amounted to 181l. This evidence was corroborated by plaintiff's solicitor, but the jury found that there had been reckless misrepresentation by Green; that the defendant bought the book-debts relying upon Green's representations, and they assessed the damages in favour of defendant at 33l. 16s. 4d. Judgment was therefore given for the plaintiff on his claim, with costs, and for defendant on the counter-claim, also with costs.

Bankruptcies and Failures.

Re Edward Henry Cole, 171 North Street, Leeds, Chemist and Druggist.

A RECEIVING-ORDER relating to the affairs of this debtor was made (on the debtor's own petition) on January 10, at the Leeds County Court.

Re Van Wyk, Dutch Star Cocoa Works, Richmond Road, Kingsland.

THE first meeting of the creditors of this debtor was held in London on January 17. The statement of affairs showed fully-secured liabilities 3,650l., unsecured 4,562l., and a deficiency of 3,999l. The debtor attributed his insolvency to want of capital, to heavy payments and liabilities in respect of advertising, and to bad seasons during 1898-99, owing to the mildness of the weather. Mr. W. H. Cannon, his solicitor, stated that he was desirous of submitting a proposal for the payment of a composition to the creditors, and the proceedings were adjourned.

Deeds of Arrangement.

Wride, William Blake, Market Place, Romsey, and Sunnyside Hill Lane, Southampton, chemist and druggist. Trustee, Herbert H. Afford, 15 Upper Surrey Street, Norwich, accountant. Secured creditors, 547l. 0s. 2d. Dated, January 6; filed, January 13. Liabilities unsecured, 213l. 17s.; estimated net assets, 152l. 19s. 10d. The following are scheduled as creditors:—

	£ s. d.
Coutts, Mrs. (rent), Southampton	... 15 0 0
Davies & Webb, Southampton	... 18 0 0
Hodgkinsons, Clarke & Ward, London	... 18 0 0

Partly-secured Creditor.

Wyles, Benjamin, 10c Liverpool Road, Birkdale, and 56 Houghton Street, Southport, chemist and druggist. Trustee, John E. D. Parker, 10 Victoria Street, Liverpool, commission-agent. Date, January 5; filed, January 10. Liabilities unsecured, 448l. 0s. 11d.; estimated net assets, 202l. 10s. 7d. The following are scheduled as creditors:—

	£ s. d.
Ayrton & Saunders, Liverpool	... 13 0 0
Bousfield, E. J., Bedford	... 100 0 0
Evans, Sons & Co., Liverpool	... 63 0 0
Houghton, —, Bolton	... 30 0 0
Idris & Co., Liverpool	... 16 0 0
Maw, Son & Thompson, London	... 30 0 0
Smith & Co., London	... 10 0 0
Summer, R. & Co., Liverpool	... 25 0 0
Tyler, C. & England Brothers (Limited), London	... 18 0 0

Preferential Creditors.

Bentinck, Saul & Co., Southport	... 24 0 0
Yates, J., Southport	... 20 0 0

Gazette.

Partnerships Dissolved.

Cory, J. T. H., and **Dixon, B.**, under the style of H. Sardou & Co., Golden Lane, and Joiners' Hall Buildings, E.C., wholesale perfumers.

Perken, F. L., Perken, E. T., and **Rayment, A.**, under the style of Perken, Son & Rayment, Hatton Garden, E.C., manufacturers and importers of optical and scientific instruments; so far as regards A. Rayment.

The Bankruptcy Acts, 1883 and 1890.

ADJUDICATIONS.

Cole, Edward Henry, Leeds, late chemist and druggist, now out of business.

McEwen, James Walker, Aberdare, mineral-water manufacturer.

New Companies & Company News.

WEBB'S PATENT (LIMITED).—Capital 5,000*l.*, in 1*l.* shares. Objects: To carry on the business of manufacturers, dealers in, and contractors and agents for chemical plant and appliances. The first directors are:—T. G. Webb (chairman) and J. McBurnie (deputy chairman). Qualification, 50*l.* Remuneration as fixed by the company. Registered office, Queen's Chambers, 7 Market Place, Manchester.

COLLINSLEE CHEMICAL COMPANY (LIMITED).—Capital 100*l.*, in 1*l.* shares. Objects: To acquire the goodwill and trade-marks of the business of George V. Boyd and James Boyd, trading as the "Collinslee Chemical Company," and to carry on the same for the benefit and under the control of the "United Indigo and Chemical Company (Limited)," who are permanent managers. Registered office, 26 Pall Mall, Manchester.

THORNTON FILM COMPANY (LIMITED).—Capital 20,000*l.*, in 1*l.* shares. Objects: To adopt an agreement with the Flexoid Syndicate (Limited), and to manufacture and deal in films, sensitized materials, chemicals, and pharmaceutical and photographic preparations. The first directors are:—J. E. Thornton, Captain G. A. Williams, C. F. S. Rothwell, and W. H. Hoyland. Qualification, 100 shares. Remuneration as fixed by the company. Registered office, 60 Oakfield Road, Altrincham.

S. HOFFNUNG & CO. (LIMITED).—To amalgamate the businesses which have been for many years past carried on at 102 Fore Street, E.C., under the name of H. Nathan & Co., and in Sydney, Brisbane, Melbourne, and New York under the name of S. Hoffnung & Co. The conversion is made for family and private reasons, and no shares are offered to the public. The management of the business will remain the same as heretofore, the directors being Messrs. S. Simauer, A. Hoffnung, L. H. Nathan, S. F. Hoffnung-Goldsmid (in London), and A. H. Nathan, G. H. Davis (in the Colonies).

MAGAFFIN CHEMICAL COMPANY (LIMITED).—Capital 5,000*l.*, in 1*l.* shares. Objects: To adopt an agreement with V. Edwards and A. J. de Hailes, and to carry on the business of chemical manufacturers, chemists, druggists, drysalters, oil and colourmen, dealers in proprietary articles, &c. The subscribers are:—F. H. Green, 4 Herne Hill Mansions, S.E., solicitor; E. J. White, 9 Balsford Road, S.E., clerk; E. E. Schmidhorst, Woodford Green, Essex, secretary; A. J. de Hailes, Wyaston, Woodford Green, analytical chemist; T. W. Glass, 16 Ravenscroft Road, Chiswick, analyst; V. Edwards, 138 Byron Avenue, East Ham, E., analytical chemist; and H. Green, "Moorlands," Bickley, Kent, printer. Table "A" mainly applies. A. J. de Hailes is the first manager. Qualification, 250 shares. Remuneration as fixed by the company, or by agreement.

CAMWAL (LIMITED).—Capital 200,000*l.*, in 1*l.* shares (100,000 pref.). Objects: To acquire the business of the Chemists' Aerated and Mineral Water Association (Limited) (incorporated in 1878); to manufacture and deal in aerated and mineral waters of all kinds, whether artificial or natural, and all materials and ingredients for the same, but so that "Camwal Waters" shall be supplied in syphons to chemists, hospitals, clubs, hotels, or institutions; trade with which is not likely to prejudicially affect the retail-trade in "Camwal Waters" in syphons as now carried on by chemists; and to carry on the business of manufacturing and wholesale chemists, druggists, drysalters, distillers, &c. The subscribers are:—H. Davenport, 33 Great Russell Street, W.C., pharmaceutical chemist; M. Davenport, The Cheal, Twickenham, J.P.; G. Goldfinch, 7 Brent Terrace, N.W., chemist; A. Gould,

54 New Oxford Street, W.C., advertising agent; G. R. Barclay, 95 Farrington Street, E.C., druggists' sundriesman; A. E. Barclay, 95 Farrington Street, E.C., druggists' sundriesman; and F. G. Pirie, 2 Granville Place, Portman Square, W., manager. The first directors are:—H. Davenport, M. Davenport, G. Goldfinch, A. Gould, H. Kemp, and J. H. Wilson. Qualification 200*l.* Remuneration 50*l.* each per annum, and 200*l.* extra for the chairman.

LORIMER & CO. (LIMITED).—Capital, 60,000*l.* in 1*l.* shares. Objects: To acquire the business carried on at Britannia Row, Islington, as "Lorimer & Co.," and to carry on the business of chemical manufacturers, chemists, druggists, drysalters, manufacturers of essential oils, essences and pharmaceutical, medicinal and other preparations, surgical and scientific instrument makers, &c. The first subscribers (each with 1 share) are:—J. Lorimer & H. Brocklesby, 41 Britannia Row, Islington, chemical manufacturers; B. Hoddinott, Tower Chambers, Moorgate Street, E.C., solicitor; A. Chatto & A. Chatto, jun., III St. Martin's Lane, W.C., publishers; J. C. Emslie, Bathurst Lodge, St. Margaret's, Middlesex (Secretary); F. H. Collingwood, 12 Eastern Road, Wood Green, N. (Clerk). The number of directors is not to be less than two, nor more than five; the first are:—J. Lorimer (Chairman), and Horace Brocklesby (permanent managing directors; special qualification, 10,000*l.*) Ordinary qualification, 500*l.* Remuneration, 300*l.* per annum for J. Lorimer, 200*l.* for H. Brocklesby, and 100*l.* each for ordinary directors. Registered office, 4 Britannia Row, Islington, N.

[We understand that this conversion is done for convenience and family reasons, and practically all the shares are held by Mr. Lorimer and Mr. Brocklesby, the partners of the firm now converted into a company.—Eb.]

CAMWAL (LIMITED).—The prospectus of this reconverted company is printed in our advertisement-section (pages 6 and 7). Subscriptions are invited for 29,258 preference shares of 1*l.* each, at par.

Personalities.

MR. JULIUS PRINCE, managing-director of Apollinaris & Johannis (Limited), will act as one of the stewards at the forthcoming anniversary festival of the London Orphan Asylum.

MR. AND MRS. T. H. W. IDRIS and Miss Idris are comparing Nile water with the Idris waters, and were amongst the visitors at Shepheard's Hotel, Cairo, ten days ago, and may visit Khartoum before they come home.

MR. A. G. KEEVILL informs us that the estate of his late father, Mr. Robert Keevill, pharmaceutical chemist, Bristol, amounted to nearly 15,000*l.* The amount given in our issue of December 30 last referred to the personality.

AT THE OPENING of the Grand Opera House, Harrogate, on January 13, by Mrs. J. A. Myrtle (Mayoress of Harrogate), the opening speech was made by Mr. J. H. Wilson, J.P., pharmaceutical chemist, Harrogate, who is the Chairman of the Grand Opera House Company. The theatre was perfumed by the Erasmic Company (Limited), and the entire takings, amounting to just under 200*l.*, were devoted to the Harrogate War Relief Fund.

THE HEADQUARTERS of the firm of E. Merck, Darmstadt, were visited recently by their Royal Highnesses the Grand Duke and Duchess of Hesse-Darmstadt, H.R.H. the Duchess of Coburg-Gotha, H.S.H. Princess Helena of Russia, and H.R.H. Princess Beatrice of Coburg-Gotha. Their Highnesses spent the best part of a day inspecting the establishment, and expressed themselves as much interested and highly pleased with what they saw.

ON JANUARY 12, at the Festival of St. John of the Sutherland Lodge of Unity, No. 460, held at the Castle Hotel, Newcastle, Staffordshire, Brother Edward Turner, chemist, who has been a member of the lodge for fifty years, was presented by the brethren with a Master Mason's jewel as a mark of esteem. At the same lodge Brothers D. H. Oxen and C. J. Wain, chemists, were installed Senior Deacon and Senior Steward respectively.

A HANDY little guide to all the Sale of Food and Drugs Acts has been written by Mr. F. W. Beck, solicitor, and published by the Grocers' Federation, Eastcheap, E.C.

MARRIAGES.

Cox—Palmer.—At St. Leonard's Church, Hove, on January 10, Arthur H. Cox, jun. (son of Alderman A. W. Cox, J.P., Brighton), to Norah Kathleen, daughter of Mr. Thomas Palmer, Hove.

Gratton—Jones.—On January 10, at Ebenezer Welsh Wesleyan Chapel, Carmarvon, George Edwin Gratton, chemist and druggist, Rhyl, to Lilla, elder daughter of Mr. J. W. Jones, Carmarvon.

Ismay—Schieffelin.—On January 13, at St. Paul's, Knightsbridge, by the Rev. H. M. Villiers, vicar of the parish, Charles Bower, third son of the late Mr. T. H. Ismay and Mrs. Ismay, to Matilda Constance, third daughter of Mr. George R. Schieffelin, of New York.

Wyatt—Müller.—On January 15, at SS. Philip and James's, Ilfracombe, by the Rev. Hanbury Barnes, M.A., Thomas Mervyn Wyatt, F.I.C., F.C.S., chemical department, Woolwich Arsenal, to Violet Amelia, second daughter of the late Mr. F. Müller, Glasgow.

DEATHS.

Arrowsmith.—On January 6, at Rensburg, South Africa, Sergeant Henry Raymond Sadler Arrowsmith, son of Mr. G. Arrowsmith, chemist, Whitstable. Aged 25.

Frazer.—At Rowmore House, Garelochhead, on January 10, Mr. Daniel Frazer, J.P., pharmaceutical chemist. In his 80th year. Although Mr. Frazer had practically retired from business for seven years, his name is still familiar to the drug-trade in Scotland, and on this side of the Border he was respected by everyone with whom he had been associated as a member of the Pharmaceutical Council.

He was one of the most remarkable pharmacists of modern times, for the business of Frazer & Green in Buchanan Street, Glasgow, with its three associated branch-pharmacies, was one of the best of its kind in Europe. Mr. Frazer was born in Glasgow in January, 1820, and, after a brief but good education, he was apprenticed, at the age of 10, to his brother, Mr. M. B. Frazer, who, after experience

in the old Glasgow Apothecaries' Hall, had opened a druggist's shop in Buchanan Street in 1830. In 1836 Mr. M. B. Frazer died, and, as Mr. Daniel Frazer was too young to take charge of the business, Mrs. Frazer entered into partnership with Mr. George Greene (as the name was then spelled), a Londoner and previously traveller in the wholesale trade. At the close of ten years' partnership Mrs. Frazer retired, and Mr. D. Frazer entered the firm on January 1, 1847. During his apprenticeship Mr. Green had treated him so kindly—more like a brother than a master—that afterwards, when a partner, Mr. Frazer used to remark, "I did not sufficiently discourage his too-frequent attendance at the Stock Exchange." The speculative excitement was too much for Mr. Green, and it led to an illness which carried him off in 1849, and Mr. Frazer became sole partner of the business. He had by this time settled down to a happy married life, which continued without interruption until a year ago, when Mrs. Frazer died. The business in Buchanan Street flourished under his care, and it became the leading dispensing establishment in Glasgow, most of the principal



consultants having sent their prescriptions to Mr. Frazer. There had always been attached to the business an aerated-water department, Mr. Frazer's brother having been one of the first druggists in the country to take up this side-line. As Glasgow extended Mr. Daniel Frazer found it necessary to plant branches in various districts, and these became model pharmacies. Several years ago the business was converted, for family reasons, into a limited-liability company, with Mr. J. W. Sutherland as managing director, so that it now goes on uninterrupted by the veteran's death. Mr. Frazer's work in connection with pharmaceutical politics commenced shortly after the visit of Mr. Jacob Bell to Scotland, before the 1852 Act was obtained, and it was in consequence of that visit, and the representations of his friend Mr. John Mackay, that Mr. Frazer, in 1853, became a member of the Society. Some years after he was elected a member of the Council of the North British Branch, and was a regular attendant at its meetings, his advice always being relied upon by the members. But that Council did not give scope to his remarkable qualities of opposition. He was essentially a controversialist, and a thorough Radical, with keen appreciation of legal rights. When, in May, 1871, he was elected a member of the London Council of the Society he quickly made it evident that his familiarity and friendship with the leading members of the Council would not prevent him advocating a more liberal policy and greater sympathy with the retail pharmacy as a trade than the Council had hitherto exercised. He was one of the most strenuous advocates for the Council-meetings being open to the Press. His work on the Council continued, until immediately after the death of Mr. John Mackay in 1881. At that time Mrs. Frazer's health was indifferent, and Mr. Frazer, in November, resigned his seat on the Council, which was taken by Mr. John Borland, of Kilmarnock. He felt very keenly Mr. Mackay's death. They were very old friends, and generally travelled together to the Council-meetings, and he at that time told us that his chief interest in the Council's affairs went with Mr. Mackay's death. He retained his connection with the administration of the Society by keeping his seat on the Council of the North British Branch, and did not appreciably abate his interest in pharmaceutical affairs. Thus, in 1883, he gave a lecture to the Glasgow Chemists' Association on "The Proposed Changes in the Pharmacy Act of 1868 and in the Educational System of the Pharmaceutical Society," in which he unsparingly denounced the policy embodied in the abortive Bill then before the trade. With the dispute that arose between the Edinburgh and London Councils in 1885 Mr. Frazer's interest in the Pharmaceutical Society may be said to have ceased. He was strongly opposed to interference with the old way of conducting the Scotch affairs of the Society, this being one of the rare occasions on which he exhibited a conservative spirit, but the moving influence with him on that occasion was his desire to maintain Home Rule. When the British Pharmaceutical Conference first visited Glasgow in 1876, Mr. Frazer was the President of the Local Chemists' Association, and those who attended that Conference will never forget the hospitality which Mr. Frazer dispensed to the visitors. About that time he delivered several presidential addresses to the Glasgow Chemists' Association, which were characterised by his far-seeing judgment of affairs, humour, and liberality of mind. We recall his striking defence of counter-prescribing (about the last thing in the world he would do himself), which, in the early seventies, was a burning topic, and upon which he spoke publicly very freely on the broad ground that being a chemist does not debar a man from giving what assistance he can to a fellow-man. Mr. Frazer never approved of pharmacists interfering with the revision of the British Pharmacopoeia. He maintained that that was purely a doctors' affair; it was their book, and if doctors wanted assistance from them they must ask for it; but "never," he said, "let us claim the right, or we shall be bound by the book in our retail-trade." His work outside pharmacy was, we believe, voluminous. He was a devoted member of the Free Church, and an active Liberal worker until paralysis laid him aside, and he retired to his country seat on Garelochhead. There, in August, 1897, on the Conference excursion day, a few of his old fellow-councillors and friends left the steamer in a row-boat to

visit him. This was his last association with the outer pharmaceutical world. He was then, and at his death, Hon. President of the Glasgow Chemists' Association. Mr. Frazer was buried on Saturday, January 13, in the churchyard of Row, in the Gareloch. The funeral was private, only the relatives and personal friends being present; the firm being represented by Mr. J. W. Sutherland and the heads of one or two departments. Mr. Frazer is survived by two sons, Dr. J. G. Frazer, Fellow of Trinity College, Cambridge, and Mr. Samuel Frazer, pharmaceutical chemist, London; and by two daughters, one of whom is the wife of Professor Steggall, University College, Dundee.

GIBBS.—On January 14, at the Central Pharmacy, Terminus Road, Eastbourne, from heart failure following bronchitis, Joseph Gibbs, chemist. Aged 75.

HOBSON.—On January 12, Mr. Charles Hobson, retired chemist and druggist, Beverley, Yorks. Aged 77. The late Mr.

Hobson was Mayor of Beverley in 1888, and again in the following year, and for a considerable period occupied a seat on the Beverley Town Council. It is believed that the sudden death in November last of his son, who had succeeded him in his business, hastened his end. Our engraving shows Mr. Hobson during his mayoralty.

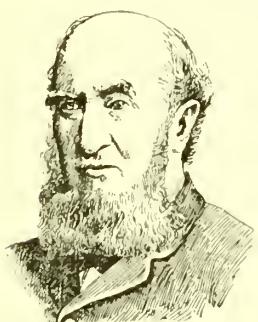
IVRY.—At Guy's Hospital, on January 1, Mr. F. R. Ivry, chemist's assistant, from the after-effects of influenza.

JARMAIN.—At Dalton Lodge, Huddersfield, on January 14, Mr. George Jarmain, F.I.C. Aged 73. Mr. Jarmain was for twenty-five years borough analyst of Huddersfield. He was formerly a schoolmaster at Almondbury National School, and afterwards a teacher of chemistry at the Huddersfield Mechanics' Institution and the Technical School into which the old institution was merged. He was also at one time a chemical-manufacturer and wool-extractor, and was the inventor of a process for destroying burrs and other foreign substances in wool.

LINES.—On January 10, Mr. George Lines, pharmaceutical chemist, Hertford. Aged 85. Mr. Lines was one of the founders of the Pharmaceutical Society, and the first local Secretary for his neighbourhood. The portrait we reproduce was published in THE CHEMIST AND DRUGGIST of May 30, 1891, on the occasion of the jubilee of the Society. Mr. Lines, who had been in failing health for some years, carried on a successful business in the Market Place, Hertford, for fully half a century. In his early days, it is recorded, as illustrating the difficulties then prevalent in the conduct of pharmacy in the country, that he had to make his own acetic acid. He erected retorts 6 feet long and 4 feet in diameter. In these he converted oak timber into charcoal, condensing the sap and fluid contained in the wood in pipes laid in cold water, which led to the receiver, from which it was pumped into the stills. The spirit was rectified, and the residue treated for acetic acid.

ROBINSON.—At Alford, on January 8, Sannah, eldest daughter of the late Benjamin Robinson, chemist. Aged 27.

STOREY.—At Bowerham House, Lancaster, last week, Mr. Reginald Storey, head of the Heron Chemical-works, Moor Lane, Lancaster. Aged 37. The Heron Chemical-works were founded by his father, who was a brother of the late Sir Thomas Storey. Deceased was for some years an officer of the local Volunteer artillery, but resigned his captaincy about twelve months ago, after a serious accident at a sham fight.



VAWSER.—On January 7, Mr. Jesse Vawser, chemist and druggist, March. Aged 60. He belonged to one of the oldest families in the town, and had successfully carried on business in the Market Place since 1864. He took an active share in public work, having for many years been an old member of the old Local Board, a Governor of the March Consolidated Charities, and a Commissioner of the First Drainage District. His wife died in 1879, and he has left a family of four sons and four daughters.

Wills of Deceased Chemists.

BLACKHALL.—The late Mr. W. J. Blackhall, who for twenty-three years represented Messrs. Burgoyne, Burbidges & Co., in China, Japan, &c., and who died on board the *Sunda*, homeward bound, on October 18, 1899, leaves estate sworn at 799*l.* 9*s.* 11*d.*, the net personality being 770*l.* 3*s.* 3*d.* He omitted to name any executor in his will, so administration has been granted to his universal legatee and devisee in trust, Mr. E. J. Reid, 11 Dmedin House, Basinghall Avenue, E.C.

COX.—The will of the late Mr. John Cox, pharmaceutical chemist, Grantham, has been proved by Mr. W. Dennis Cox, pharmaceutical chemist, Grantham, son and sole executor of the testator, whose estate was sworn at 300*l.* 19*s.* 9*d.* gross and 2,104*l.* 16*s.* net.

GRIFFITHS.—The late Mr. G. Griffiths, chemist and druggist, Bala, Merioneth, leaves personality entered for probate at the sum of 630*l.* 18*s.* by his widow and sole executrix, Mrs. A. Griffiths.

HALLIWELL.—Letters of administration to the estate of the late Mr. John Halliwell, chemist and druggist, 27 Bridge Street, Rochdale, who died intestate, have been granted to his widow, Mrs. Grace Halliwell, by whom the value was sworn at 577*l.* 7*s.* 1*d.*

HARVEY.—The estate of the late Mr. Richard Musgrave Harvey J.P., of Thomson, Hinckley & Co., 7 Mining Lane, and of the Silvercharin Corporation (Limited), &c., who died on November 10, 1899, has been entered for probate at the sum of 42,829*l.* 16*s.* 4*d.*, of which 22,806*l.* 0*s.* 3*d.* is net personality. His executors are his widow and his brother, Rev. C. M. Harvey.

KERRY.—The value of the estate of the late Mr. Thomas Kerry, chemist and druggist, 164 Huddersfield Road, Ravensthorpe, Mirfield, Yorkshire, has been sworn at 382*l.* 8*s.* 7*d.* by Mrs. Kerry, the widow, and Mr. S. Vero, the executors, to whom probate of the testator's will has been granted.

TAYLOR.—The will of the late Mr. Benjamin Taylor, chemist and druggist, 20 Moorland Road, Leeds, has been proved by Mrs. F. M. Taylor, the widow, and Mr. Thomas Taylor, surgeon, Methley, brother of the testator, whose estate was sworn at 15,190*l.* 13*s.* 3*d.*

TOMPSETT.—At the Principal Probate Registry letters of administration to the personal estate of Mr. Walter H. Tompsett, chemist and druggist, 163 Seaside, Eastbourne, who died intestate on July 4, 1899, have been granted to his widow, Mrs. Helen F. Tompsett, by whom the value was sworn at 323*l.* 12*s.* 6*d.*

TROLLOPE.—At the Principal Probate Registry the estate of the late Mr. E. H. Trollope, chemist and druggist, Trowbridge, Wilts, has been entered at the sum of 909*l.* 5*s.* 5*d.* The deceased's executors are his son, Mr. Herbert E. Trollope, and Mr. John Howard Foley.

WALL.—The will of Mrs. Harriet Wall, chemist and druggist, 67 Market Street, Shaw, Crompton, Lancashire, who died on April 6, 1899, has been proved by her daughter and sole executrix, Mrs. Anne L. Beverley. The deceased's estate was sworn at 1,694*l.* 12*s.* 3*d.*

WALSH.—The gross value of the estate of the late Mr. Zacheus Walsh, wholesale druggist, Moseley Bank, Cheadle, Hulme, Cheshire, has been sworn at 7,519*l.* 10*s.* 7*d.* Probate of the deceased's will has been granted in London to his daughter, Miss Clara Walsh, and to Mr. John Smith, drysalter, Stockport, the other executor therein named.

WATERALL.—The will of Mr. G. E. Waterall, chemist and druggist, Upper Talbot Street, Nottingham, who died on September 7, 1899, has been proved by Mr. Herbert Lancashire and Mr. Thos. Wilson, both of Nottingham, the executors of the testator, whose estate was sworn at 19,062*l.* 11*s.* 1*d.*

WILSON.—The will of the late Mr. Stephen Wilson, chemist and druggist, Park Road, Peterborough, has been proved by Mrs. Wilson, the widow, Mr. J. W. Wilson, M.D., and Mr. H. S. Colman, the executors, by whom the testator's personality was sworn at 4,365*l.* 9*s.* 3*d.*

Students' Corner.

HOW TO LEARN.

IT is possible to write columns about the degeneracy of apprenticeship. Fifty years ago the master took pleasure in instructing his pupil; that was what he was paid for doing, and it was practically all the instruction the druggist's apprentice got. There is a big change now, but events and times have changed; there are books and schools and schemes for encouraging study which did not exist then. Whether they are better or worse than what our forefathers had the advantage of does not particularly concern those for whom these columns are printed, and who are mainly concerned in taking all advantage of facilities for improvement and study that exist, ultimately securing the hall-mark of competence.

Taking the student of pharmacy at the beginning, we assume that he wants to make the most of his apprenticeship. There are many ways in which he can find opportunities for gaining information. Even in bottle-washing (if he has that to do) there is something to be learnt. Why is one bottle washed with alkali, and another cleaned with hydrochloric acid? The live apprentice will not rest satisfied till he finds that out for himself, and he need not be surprised if the fact comes in handy in the examination-room. In his daily work of dusting the shop-bottles he has splendid opportunities of acquiring complete familiarity with the names and general characters of all the galenicals and chemicals in the shop. The very act of washing oil, resin, tar, or varnish from his hands, or cleaning a mortar which has been soiled with one or other of these substances, will give him, if he asks the reason why, much valuable instruction as to the action of various solvents. His very mistakes will be helpful, for he will not fail to profit by the knowledge when he learns, e.g., why it was that the glass mortar cracked right across when he dissolved common salt in it to make brine.

Next to personal observation at the daily tasks the thing most important for the apprentice to do is to take advantage of any local facilities for education that there may be. There are now comparatively few towns in the country where facilities for learning elementary chemistry and physics are not available. Where a choice of such classes is to be had we recommend students in their first year to take the first stage (Science and Art Department) of mathematics—if they have not already had this subject at school. The algebra, in particular, they will find of enormous advantage in their future studies, and, as a foundation for a proper acquaintance with physics and chemistry, a knowledge of mathematics as far as the first stage is really essential. For the second session the student should take up physics and inorganic chemistry; in the third he could continue his chemistry, theoretical and practical, at least to the advanced stage, and make a beginning with botany, while in the fourth year he should be able to overtake organic chemistry and advanced botany. A young man who has laid such a foundation as is thus obtained need have no fear of any examiner after he has had a few months' hard reading at a pharmacy-school. It appears that there is a lack of opportunity for studying botany in the way we have mentioned. There are usually classes in chemistry in abundance, but either the demand for instruction in botany is too small to be worth supplying, or the standard hitherto set up by the S. and A. Department has been much too high. Fortunately no eager student can be deprived of the opportunity afforded him by Nature, and she, after all, is the best teacher.

Pharmacy and *materia medica* are best studied practically. Where an apprentice has the duty of assisting in the manufacture of ointments, pills, tinctures, and the like, he will learn more by intelligent attention to details in the actual work in hand than by weeks of "reading." Similarly with *materia medica*. Every apprentice ought to be perfectly familiar with the appearance and character of all the commoner drugs long before he is out of his apprenticeship, together with much of the information required in the Minor examination. Prescription-reading he should be perfectly familiar with.

For young men who have not the opportunities of study mentioned above there remains text-book instruction, and future articles in this series will deal with this.

THE FACILITIES FOR EVENING STUDY now open to young chemists are remarkably good compared with what they were twenty years ago, especially in London, which is generally behind the provinces in anything which tends to popularise culture. There are now numerous institutes and colleges in the different districts of the Metropolis at which excellent instruction is given at very cheap rates. At the Goldsmiths' Institute, New Cross, S.E., where that clever young chemist, Mr. W. J. Pope, F.I.C., F.C.S., is lecturer on chemistry, a course of fifteen weekly lectures on organic chemistry begins on Friday, January 19, at 8.30 P.M. The course will be rather advanced for those who are beginning the subject, as it will include discussion of recent work and current views relating to organic chemistry; but that is the very thing which should tempt many Minor and Major men in the district to get a crown's worth between now and Easter.

Scientific Progress.

Mandragorine.—Thoms and Wentzel some time ago showed that Ahrens' mandragorine, the alkaloid of mandragora-root, was a mixture of hyoscyamine with one of the related alkaloids. Wentzel, in a paper read at a recent meeting of the German Pharmaceutical Society, showed that this body is hyoscine. To this he assigns Ladenburg's original formula, $C_{17}H_{19}NO_5$, which is not the same as that for Schmidt's scopolamine.

Rapid Estimation of Uric Acid.—Gautrelet (*Reptoir de Pharmacie*, 1900, I, 19) recommends the following method for the rapid estimation of uric acid. Twenty c.c. of the unfiltered urine is exactly neutralised with potash-solution, and then acidified with 5 c.c. of 15-per-cent. acetic acid. It is then titrated with the following solution:—

Sulphate of copper (crystallised)	... 2·4 grammes
Sulphate of sodium	... 5·0
Acetic acid	... ... ... 5 c.c.
Water to	... ... ... 1,000 c.c.

until a drop, tested on a white tile with a solution of potassium ferrocyanide faintly acidified with acetic acid, gives a rose-red colour. Each c.c. of solution used corresponds to 0·1 gramme of uric acid per litre.

Acetic Acid as a Solvent.—Dr. E. R. Squibb is still engaged in his investigation of the merits of acetic acid as a substitute for ethyl alcohol in extracting the active principles of drugs. His last paper (*Am. Journ. Ph.*, Jan.) deals with the solvent applied to belladonna-root. The sum of the paper is that the spirituous menstruum gives the largest yield of alkaloid in the early part of the percolate, and the smallest yield of inert and useless extractive matter, but is slightly inferior to the acid menstruum for washing out the last portion of alkaloid. The acid preparation is lighter in colour, and has not deposited after three months. The alcoholic preparation is very dark, and within three months has thrown down a precipitate that contains traces of alkaloid. The acid preparation mixes with water; the spirituous one precipitates.

The Estimation of Mydriatic Alkaloids.—The latest contribution from the Marburg laboratory, by Dr. Ernst Schmidt, deals with the estimation of the alkaloids in the leaves of *Datura Stramonium*, *Hyoscyamus niger*, and *Atropa Belladonna*. The process which Schmidt advocates as being accurate and open to least objection is as follows:—Ten grammes of the finely powdered leaves, dried to a constant weight over quicklime, is treated with 90 grammes of ether and 30 grammes of chloroform. To this 10 c.c. of 10-per-cent. soda-solution are added with constant shaking, and the mixture is allowed to stand for three hours. About 10 c.c. of water is then added, or sufficient to make the powder settle, leaving the ether-chloroform solution clear. After an hour the liquid is filtered and 60 grammes (which, assuming that there is no loss by evaporation, Schmidt takes as equivalent to 5 grammes of the leaves) placed in a small flask. Half is distilled off to remove ammonia, but care must be taken not to distil more, or difficulty is found in the after-treatment. This residue is transferred to a separator, the flask being washed with ether, and the whole is shaken with 10 c.c. of centi-normal hydrochloric acid. The acid layer, to which are added aqueous washings of the ethereal layer, is filtered into a flask and made up to 100 c.c. A little ether and 5 drops of a solution of iodoezin are added (1 in 500 of alcohol), and centi-normal potash is added until the end-reaction is observed. Each c.c. of centi-normal hydrochloric acid used corresponds to 0·00289 gramme of atropine or hyoscyamine.

Observations and Reflections.

BY XRAYSER.

THE WAR NEWS of the *C. & D.* is of keen interest though many of us will be delighted when that feature can be abandoned. Certainly the drug-trade contributing its share, both in men and in money, to the relief of the nation's heavy burden. The medical profession can justly make a similar claim; but so indeed can every class and section of society. Those gallant young fellows who go out from our midst to serve their country, either as soldiers or under the Red Cross, may be sure that we shall all be following their movements with eagerness and wishing them a safe return. I hope it cannot be the case that the War Office has issued any definite notification which will restrict their communications to this journal. Such a proceeding would be as unwise as it would be unjust. The service is rough and the pay is poor; we all know that, and I do not see that the men who have written from the camp are disposed to make any querulous complaints. They expected to rough it, and they were certainly not actuated by avarice. But we at home want to know all about their experiences, and nothing will be so sure to make service under the flag unpopular as an unreasonable exercise of official authority.

* * * *

BRITISH FOREIGN TRADE.—No one can realise what the figures **814,000,000*l.***, the total estimated value of British foreign trade in **1899**, means. The imports of the year were valued at **485 millions sterling**. Of this total some **65 millions** were re-exported, leaving about **420 million pounds' worth** of foreign produce consumed or used in this country. On the average, therefore, every man, woman, and child in the United Kingdom, from the prince to the pauper, bought last year **10*l.*** worth of corn, cotton, wool, sugar, tea, or something from abroad, and on that **10*l.*** paid all the middlemen's profits too. Our total exports in the year reached the value of **330 million pounds**, or **155 millions less than our purchases**. Where are now those alarmists who, a few years ago, flooded the papers with their prophecies of ruin if this balance of trade kept going against us? Perhaps they have come to understand it. It has been estimated that all the gold and silver in the land would not amount to much more than **200 millions**, so if we paid for the difference between our purchases and our sales in cash we should be bankrupt in a couple of years. But so far are we from doing this that last year Great Britain received **11 million pounds** worth more gold than she paid away. Of course, the difference apparently against us is mainly the profit due to this nation from foreign investments.

* * * *

THE HOME TRADE of the country cannot be gauged so closely as the foreign trade, but all the available evidence goes to show that it has been generally prosperous for some time past. And there is one feature of it that often surprises me. It is the wonderful improvement in shops, especially in suburban shops, which has developed since retail traders were first ruined by the stores. Somehow they flourish better in their decadence than they did in their prime. I had occasion the other day to visit some of the northern regions of London. From the Swiss Cottage I went along the Finchley Road, thence to Highgate, then to Muswell Hill, and I finished my tour at Hornsey station. Everywhere I found rows of new shops of all kinds (including some very handsome pharmacies, particularly two or three in the Finchley Road), and all were most expensively and substantially fitted, and seemed to be lavishly stocked. I came across an acquaintance in a dull road who was having a

private house of his converted into a shop. "Why," I said, "shops are not wanted about here, I should think." "Shops!" he said; "you can let shops anywhere; I have had more than a dozen applications for this one already."

* * * *

THE DEATHS of E. C. C. Stanford, J. G. F. Richardson and Daniel Frazer, all within a few weeks, leave British pharmacy much the poorer. The last two had been laid aside from active work for some years, but Mr. Stanford, always fertile in ideas, seemed good for much more service in the higher walk of our vocation. They were three very different men, but they all had one characteristic in common, and it was unusual enough in leading pharmacists to be noticeable. They were all absolutely free from any suspicion of cliqueism. When Frazer and Richardson were together in the Council they were in a sense a pair. Daniel Frazer was a fiery Radical, and "the Major" was as staunch a Conservative, and they had many a little spar over their political differences. But if such a thing as party government could have arisen in that chamber, both men would certainly have been on the Liberal side. Mr. Frazer was a popular and successful pharmacist, but his liveliest interests were concentrated in his Church. I think he was a Free Kirk man; I am sure he would have belonged to whichever party was the most dissentient; and I have heard him say that he had often regretted he was not brought up to the ministry. Mr. Frazer was always very earnest in whatever controversy he happened to be engaged in, and he was seldom out of one of some kind; but I never heard of his losing his temper or saying a bitter word of or to any opponent.

* * * *

AN EXTRA PHARMACEUTICAL EXAMINATION, as advocated by Professor Tichborne in the Irish Pharmaceutical Council, is a project which deserved a better reception than it got. The *C. & D.* not long ago urged that the British Major examination should be converted into a test in regard to analytical chemistry. The qualifying-examinations in both Great Britain and Ireland have not for their objects the qualification of analysts, but they go, as Dr. Tichborne says, half way in that direction. There is a lot of analytical work lying about, and why should not capable pharmacists pick it up? There is no reason, apparently, except that the Institute of Chemistry might not like it. Our present Major examination is of practically no value, and will die out, but a post-graduate course, and a sufficiently severe examination at the end of it, would soon be appreciated both by pharmacists and the public. Ultimately the Local Government would have to recognise it.

* * * *

NOTHING TO REPORT.—President Martindale says the committee to which the consideration of action affecting the Companies Bill was referred "cannot report, if they have nothing to report." But nothing could be more interesting than a report showing why there is nothing to report. The condition suggested by the President's remark would be an amazing one if it were declared by any other executive body. Parliament is to meet on the 30th of this month, a Bill is likely to come before it containing a clause which has agitated the trade more than anything which has been proposed for a generation, there is a great chance for pharmacy, a chance which may never be offered again, and our representatives have "nothing to report." And only one member of the Council dissents from this policy, or rather this negation of policy.

"I HAD supposed until yesterday, doctor, that the days of the bleeding of patients were past." "And so they are. But what has changed your mind?" "The bill you sent me."

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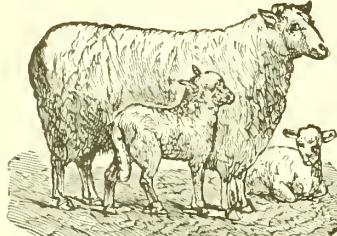
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Editorial Comments.

Deadlock.

THAT is the paramount tone of pharmaceutical affairs in Great Britain at the moment. Once more the Pharmaceutical Council has failed to respond to the feeling of the country, and by masterly inactivity is bringing the company-question back to the condition in which the House of Lords left it in 1880, but with the accumulation of difficulties which has gathered in that time. Then the opportunity for

amendment of the Pharmacy Act was deliberately frittered away, owing to the supineness of a Council which had the minimum regard for trade interests and the maximum respect for professional status. It has taken all these years to educate our pharmaceutical leaders up to the sticking-point. The point of attack presented itself first in the Lord Chancellor's amendment to the Pharmacy Bill, and that was refused. The Companies Acts Amendment Bill offers now an even more favourable opportunity for striking at the evil which threatens to extinguish individual pharmacy, and the trade has forged a weapon for the attack; but the nerveless grasp of the Council appears too feeble to hold it. We are now within a fortnight of the opening of Parliament and the probable resurrection of the Companies Bill, but the drug-trade of the country is more in the dark than ever as to how its case in respect to company-pharmacy is to be submitted to Parliament. We do not overlook the President's recent letter to the Board of Trade: that, indeed, is the reagent which has precipitated the deadlock. The section of the Council members who do not wish to touch the company-question at all take the letter as reasonable excuse for the present inaction. We stand, therefore, where we did at the beginning of November two precious months have passed without the Pharmaceutical Council making any preparation for the Parliamentary Session, and the drug-trade throughout the country has, meanwhile, expressed its sentiments on the question, freely and collectively promising to give the Council its support in any reasonable plan which it may adopt to have the trade-opinion used for amending the pharmacy clause in the Companies Bill. It should be clearly understood that the President's letter has not been submitted to or endorsed by the Council. The fact that a meeting has been held since it was published, and an opportunity to bring it before the Council was presented by Mr. Glyn-Jones and refused, is a reflection upon the authority of the letter which almost amounts to a disclaimer.

The events of the past few months force us reluctantly to the conclusion that the Council is hopelessly out of sympathy with its constituents. This is a fate which has dogged the Pharmaceutical Society during the past fifty years, and it is not surprising that it should be so when the fact is borne in mind that changes in the Council representation have never been so radical as to affect the traditional policy. The few new members who have come into it now and then have perforce dropped into the old methods, and there has never been an infusion of new blood sufficiently powerful to effect a change in the organism. The Council has, honourably enough, endeavoured to perpetuate the atmosphere created by the distinguished founders of the Society; and in respect to the traditions which inculcate special attention to the consolidation of the Society as a voluntary organisation, the greater work entrusted to it by the 1868 Pharmacy Act, of conserving the trade interests of all who are on the register, has been indifferently attended to—as the present deadlock admirably illustrates. During the past dozen years members have been returned to the Council who expected, and were expected, to break down the routine character of the Council's work and to extend its interests, but with a few exceptions all have become prosaic supporters of the traditional policy. We may instance Messrs. W. G. Cross, John Harrison, and G. T. W. Newsholme as amongst that class. Each entered the Council as a freelancer, and has become a Vice-President and appropriately orthodox. We also recall the efforts of Messrs. Gwilym Evans and James Watt to break down the traditional system which governs the Council's affairs and its administration of the Pharmacy Act. Both retired because they found it waste of time and energy. Now we have indications from

Mr. Glyn-Jones in his speeches at Blackburn last week, that his virile efforts to liberalise the Council in effort and policy are blocked. He succeeded in defeating the Law and Parliamentary Committee on the company-question two months ago, and gave an indication of the policy which should be preferred before the committee's policy, but his efforts have been paralysed by the inner workings of Bloomsbury. Yet every meeting which he has addressed in the provinces has supported him. When this is considered along with the burking of his efforts on the Council, the electors must see that there are only two ways out of the difficulty—either to get Mr. Glyn-Jones off the Council as an ineffectual member or return at the earliest opportunity seven others like him, who will be destitute of the traditional sense which hallows memories and is blind to present opportunities. This is really a matter of pressing importance, and the enlarged electorate of the Society should give it their earnest consideration, with a view to energetic action at the next election.

Agent or Seller.

THE decision of the Court of Queen's Bench in the appeal by the Pharmaceutical Society against the finding of the Worcester County Court Judge (Sir R. Harrington) that a florist who took an order and the money for a preparation of arsenic did not sell poison is not surprising. The defendant was charged, on August 8, with "having sold or kept open shop for retailing, dispensing, or compounding of poisons." All he did was to take the order, the name and address of the purchaser, and the money for the article. He forwarded the order to the Boundary Chemical Company, for whom he acted as agent. The company executed the order, and allowed the defendant a commission upon it. It was proved that defendant did not keep the poison, or any other, in his shop, and the Judge held that he was the agent and not the seller. The circumstances of the case, and the decision, were exactly of that nature which may lead to extensive evasion of the Pharmacy Act, especially the exclusion of that contact between the buyer and seller which the Pharmacy Act requires, and which the Arsenic Act was especially framed to ensure. The company that delivered the arsenic to the purchaser was fined under the Pharmacy Act for illegal sale six weeks before the present case was tried.

From the general legal point of view the case is interesting. The Society relied for its contention that the defendant was the seller upon the Templeman *v.* Trafford case and the equally well-known Pharmaceutical Society *v.* Wheeldon case, neither of which was quite similar to the Worcester one. In the first-mentioned the defendant Trafford was sued under the 17th section of the Act for selling poison improperly labelled. The defence was that defendant sold the poison as the agent of a registered chemist, whose label it bore, and for whom he acted as a servant. He was convicted, and the Queen's Bench upheld the conviction. The Wheeldon case is the historic one in which Mr. Justice Hawkins upheld the correctness of a County Court Judge's decision that any assistant who sells poison on behalf of a principal must be qualified. In other cases in which the question of agency came in, and in which convictions under the 17th section were obtained, the so-called agent handled the poisons. We presume that in relying upon the Trafford and Wheeldon decisions the Society's counsel tried to make the best of a weak case, for the Worcester one was not parallel with these, while it was taken under the 15th section, and the charge of selling was complicated by the addition of the charge of keeping open shop for retailing. The County Court Judge pointed out that the Boundary

Chemical Company, not the florist, were the sellers in this instance, and in the case of other goods than poison that is incontrovertible considering the circumstances of the case and the law of agency. The Queen's Bench has upheld the decision, Mr. Justice Grantham pointing out that the defendant was merely a conduit-pipe to introduce one person to another. He illustrates the nature of the case by supposing a person went into a chemist's shop to buy rat-killer, saw a boy serving in the shop, and told him what he wanted. The boy might then direct the purchaser to go to his master, who was serving at another counter, or offer to tell the master himself what the purchaser required. Then if the master, a qualified man, supplied the poison, it could not be said that the boy was the seller. We do not think this is sound argument, the supposititious case being quite different from the Worcester one, where the defendant was the intermediary between the purchaser and the alleged seller in everything but handing over the poison. If agency solely had been the ground for dismissing the appeal, there would have been slender hope of success in carrying the case further, but there appears to be good ground for the Pharmaceutical Society persevering with the appeal. Should the interpretation of the law be established it would lead to open violation of the Pharmacy Act, as, for example, by drug-stores conducted by unqualified persons taking orders for poisons in Part 2 of the Schedule for execution at an affiliated store controlled by a qualified person. The Act contemplates that persons keeping open shop for retailing poisons shall see or know the purchaser, and this agency arrangement defeats that object. It is obvious that the unqualified agent undertakes part of the duties imposed by the statute upon the qualified seller, and this delegation is clearly contrary to the spirit of the Act. If, therefore, the Queen's Bench decision is ultimately confirmed the Pharmaceutical Society, as custodians of the Pharmacy Act, will have excellent reason for asking Government assistance in strengthening the Act so that the agency arrangement will not sap its strength as the company principle has done. Meanwhile the principals in cases where poisons of the first part of the Schedule are the articles sold through agents should be vigorously prosecuted.

The Phenol Proclamation.

ALTHOUGH the Foreign Office has recently been giving chemical manufacturers and merchants warning regarding the exportation of phenol and products closely allied to it, last Saturday's proclamation by the Queen (see page 84), has come upon the trade as a thunder-clap, and it has already somewhat paralysed action in certain directions. The essential object of the proclamation is to prevent our enemies getting supplies of high explosives, of which lyddite and melinite are the best examples and which contain nitro-derivatives of cresol or phenol. The Foreign Office suspects that continental manufacturers of explosives have been sending these substances out to the Transvaal since the war broke out, and this extreme method of stopping supplies has been adopted. The raw material most used on the Continent is one or other of the cresols which are exported to a very large extent, especially to France, for the manufacture of melinite. Europe as a whole depends upon Great Britain for a goodly proportion of the cresols and phenols that are used for all purposes of conservation and destruction, so that the proclamation not only affects the explosives industry, but will seriously interfere with the production of many synthetic compounds in which cresols or phenols are used, including salicylic acid. Apart from this our colonies and extra-European foreign customers will be completely debarred

from the purchase of carbolic acid from Great Britain, and as there are now enormous quantities exported, a great deal of inconvenience will be occasioned. It appears to us that the complete prohibition of export and coastwise shipment is an exceedingly extreme measure to adopt, and that before this course had been decided upon it would have been advisable for her Majesty's representatives to confer with a few chemical authorities with the view of formulating restrictions which would not have interfered with legitimate trade, especially trade with our own colonies, India, China and Japan, or, indeed, any distant part of the world from which the substances could not be returned in time to upset the calculations of the belligerent parties. We understand that a meeting of the chemical section of the London Chamber of Commerce has been called for Monday, with the view to discuss the whole matter, and to take such steps as may be necessary.

So far the proclamation has had no effect upon the market-value of cresols and phenols. This is partly due to the fact that the manufacturers have some expectation of the Government relieving them of the stocks which have by the proclamation been shelved for want of a market; but hitherto the cresols have not been used in the manufacture of lyddite, and there is no evidence that our Government is pressed for the material required in the manufacture of this explosive. On the other hand, it seems absolutely certain that we must almost immediately pay higher prices for salicylic acid and salicylates and all other derivatives of phenol which have been imported into the country, seeing that the German production of phenol is so limited in comparison with her consumption of it that hitherto we have supplied her with the raw material, and taken it back in the form of synthetic products. In view of the unsettled position, London agents for German salicylic-acid makers are not accepting orders, and there is some talk of applying the *force majeure* clause to contracts. It is obvious, therefore, that the proclamation has a wider influence than the authorities may have anticipated. It may be a blessing in disguise, so far as salicylic acid is concerned, for it provides an excellent opportunity for chemists to begin manufacturing salicylic acid in this country.

Profiting by Experience.

CHEMISTS and druggists in the Isle of Man are determined not to repeat the transgressions of their brethren "of the adjacent island." The question at present agitating the minds of British chemists and druggists has evidently alarmed them, and they have determined to nip the company evil in the bud. Fortunately for the Isle of Man, the company octopus (metaphor is the fashion at present when speaking of companies) has only planted one tentacle in their domain at present, but they fear for more, and the Bill for the Regulation of the Sale of Drugs and Poisons, which is waiting the sanction of the House of Keys, is a good opportunity for chemists exercising what power they have in the matter, especially as Mr. Boot has already had his say. The Special Committee appointed to report on the weak points in the measure sat on January 10, and a deputation of ten chemists was in attendance. These gentlemen had retained Mr. Cruickshank, High Bailiff of Ramsey, and one of the leading advocates of the Island, to speak for them, and he did it well. The principal objection to the Bill, he said, was in regard to what is called company-trading. Under the Bill as it is at present there is nothing to prevent a company directed by unqualified persons from acting as chemists and druggists. It is the same in England, remarked Mr. Cruickshank, and proposals to remedy that

matter had been upheld by no less eminent an authority than the Lord Chancellor, who had expressed the opinion that companies should be made liable for breaches of the Act of 1858. Mr. Cruickshank brought forward all, or nearly all, the arguments which have been used against company-pharmacy within the past year, showed the deficiencies in the English Act, and said that his clients would prefer that company-trading should be prohibited altogether, but if that could not be done, then companies should be made liable for any infringement of the Act. The principal objection in England to interference with drug-companies was, he pointed out, that the practice has grown to such dimensions that there would be interference with very large vested interests. That argument does not apply to the Isle of Man. It was further argued that if it was considered necessary that the company established in the Island could be protected by a retrospective clause, it ought to be limited to the one shop which that company had now established. It is interesting to us to learn that the learned counsel adopted the *C. & D.* view in regard to the management of the shops of companies by qualified persons. That, he said, was unsatisfactory, as large companies are controlled by a board of directors, none of whom need be, and few of whom are, qualified persons, and these men controlled the whole concern and the purchasing of the drugs, so that the qualified man had to act entirely at the bidding of these unqualified mentors, and if he dared to complain of the management of the directors, or of improper conduct of the shop, he would soon get his dismissal. This admirably puts the danger which would arise in the event of the qualified-manager suggestion being adopted. Passing from this vital question, Mr. Cruickshank suggested that carbolic acid and its poisonous compounds and preparations should be added to the Poisons Schedule, which should also include phosphorus and vermin-killers containing phosphorus, hydrochloric acid, sulphuric acid, sulphate of copper, chlorine and its poisonous preparations, and red oxide of mercury and ammoniated mercury with their preparations. He also suggested that some definition of the term "patent medicine" should be inserted. These medicines, he said (on the authority of his clients), are distinguished in England by being stamped, but we would point out that the patent medicines of the Pharmacy Act, 1858, have been held to be medicines which are the subject of letters patent.

Mr. J. C. Redcliffe, giving evidence in support of Mr. Cruickshank's statement, said chemists generally objected to company-trading, and especially to companies usurping titles which implied a competency which they did not possess. And with regard to qualified managership, he added that, besides having no voice in the choice of the chemicals and drugs used, the qualified assistant was frequently changed, and there were no means of telling whether successive managers brought appropriate qualifications; and when changes in the management were so frequent it was impossible for assistants to acquire an acquaintance with people in the town, which was so necessary under the Act in regard to the sale of poisons. He suggested that a clause, bringing within the scope of the Act all partnerships, companies, and associations, or any other corporate body, should be included in the Bill, and that every person in charge of a shop should be compelled to exhibit a certificate of his qualifications. Mr. Redcliffe concluded by saying that, if their titles were protected, the chemists would be willing to allow a limitation of seven years for chemists' widows to dispose of their businesses. In a closing speech urging the views of his clients, Mr. Cruickshank said that had it been fully understood that it was the intention of the English Act to include companies, and that only a

technicality led them to be unrestricted, the Manx Council should certainly have corrected such a manifest error in the Bill. The Chairman of the Committee (Mr. J. T. Cowell) promised that what had been advanced would receive the earnest consideration of the Committee, and they hoped to report so that progress might be made with a Bill at the sitting of the House of Keys on January 16. A correspondent, who was present at the interview, states that he was struck with the painstaking efforts of both Chairman and Committee to obtain the fullest information of what the chemists want, and their desire to meet their wishes in every way was evident.

Since the foregoing was put into type we have learnt that consideration of the Bill was resumed in the House of Keys on the motion of Mr. Cowell. Mr. Cruickshank obtained leave to appear on behalf of the chemists, and he and Mr. Cowell explained the scope of the Bill. The latter stated that, while the Committee were not able to accept all that the chemists who appeared before them had urged, they recommended for adoption a clause which would put companies on the same footing as individuals, and would also cause all chemists' shops to be under the charge of properly-qualified persons—an assurance which the public does not possess at present. The Bill was passed, and the amendments now introduced will be the subject of consideration by the Legislative Council. The terms of the new clause are that no company shall carry on business as chemists and druggists unless such business is *bona fide* conducted by a manager or assistant being a duly-registered pharmaceutical chemist or chemist and druggist; and, further, that anything which would be an offence under the Act if committed by an individual shall be an offence if committed by a company. The suggested additions to the poisons schedule have been agreed to. We have not yet seen the Bill as amended, but these particulars sufficiently indicate that the chemists of the Island have by their action scored a victory.

THE STANDARD FOR DRUGS.

West Ham Solon: The B.P. is not a legal standard for the sale of drugs. Go away, my good man, and compound your compound rhubarb powder just as you please.

East Ham Sages: This lime-water is not B.P. We must fine you a shilling for selling it.

High Court Judges: Both wrong. Call more evidence.

HOW DO WE STAND?

Mr. W. L. Currie is not the only one who asks this question in regard to the B.P. as a legal standard. What astonishes us about the matter is that so many leading pharmacists are surprised to find that what Magistrates uphold is an admitted fact—viz., that the British Pharmacopoeia is not, and never has been, a standard for drugs under the Sale of Food and Drugs Acts. It was expressly excluded from the Acts, and there is nothing in the law authorising the Pharmacopœia which definitely converts it into a trade standard. The decision of Chief Justice Coleridge and Justice A. L. Smith in the White *v.* Bywater case (*C. & D.*, May 21, 1887) applied solely to the facts laid before these Judges in respect to tincture of opium. The evidence was to the effect that the term "tincture of opium" is understood in the trade to mean the tincture of the British Pharmacopœia. The Sheffield Magistrate had held that when British Pharmacopœia tincture of opium is wanted it must be asked for, and he dismissed the case. The Queen's Bench Division reversed that decision, and since then it has generally, but not invariably, been the custom of Magistrates to take the British Pharmacopœia as the standard for medicines mentioned therein. That fact appears to have been construed to mean that the B.P. is binding upon the Magistrates. (We do not say that it is *not* binding upon

retailers.) It is very good evidence in individual cases or individual articles, but there is nothing in the statutes imposing its standards upon retailers. It will be seen, therefore, that it is really loyalty to the B.P. on the part of pharmacists which has given the book its place in the Courts, for evidence that any particular standard of the B.P. is not followed in the trade has sufficed to secure the dismissal of cases—*e.g.*, soda-water. This would have been impossible if the B.P. were binding in law.

THE WEST HAM CASE.

The chemist in West Ham who convinced the Magistrate there that the B.P. is not the standard for compound rhubarb powder was fortunate in his defence. It is pretty certain that if the case for the B.P. were put before the Queen's Bench there would be decisive declaration in favour of the Pharmacopœia being the trade standard. That is merely a question of evidence, and the evidence could be overwhelming to the effect that the prescription for Dr. Gregory's powder (we have published a facsimile) is exactly as the B.P. formula, and the question of nomenclature could quickly be settled. In the absence of such evidence a clever advocate can be sure of convincing a Bench that the B.P. is not a standard under the Sale of Food and Drugs Acts. There is, however, one aspect of the question which is generally overlooked. An Order in Council, dated February 3, 1851, declares it to be illegal for "apothecaries and others whose business it is to compound medicines," &c., to compound or make any medicine named in the London Pharmacopœia.

in any other manner or form than is or shall be directed, prescribed, or set down by the said book, and according to the weights and measures that are or shall be therein limited, except it shall be by the special direction or prescription of some learned physician in that behalf.

The Medical Act, 1862, provided that any Act, Order in Council, or custom relating to any former Pharmacopœias should be deemed after the publication of the British Pharmacopœia to refer thereto. This applies only to England, Wales, and Berwick-on-Tweed, and although offending parties "shall not only incur her Majesty's just displeasure, but be proceeded against for such their contempt and offences according to the utmost severities of the law," the order is practically inoperative. Anyway, compounding is not selling.

PECULIAR SCOTS.

Messrs. Cummings Brothers, Dundee, send us copies of two testimonials, purporting to be given by them, which they have received from different correspondents in England. These state that Mr. David Fettis was employed by them "for the last fourteen months" in one instance and "the last sixteen months" in another, while, as a matter of fact, Mr. Fettis was in Messrs. Cummings Brothers' service for six months only up to November last. Any chemist who receives similar testimonials should communicate with Messrs. Cummings Brothers.

A Hampstead subscriber (235/37) also informs us that he took into his employment provisionally an assistant giving the name of W. F. Willins, who gave Messrs. Smith & Bowman and Messrs. Raines, Clark & Co., Leith, as references, stating that he was eighteen months with the former and four years with the latter. Messrs. Smith & Bowman have replied that they never had anyone of that name in their employment. Willins "says he was regularly brought up to the trade in Scotland, and went up for the Minor last June at Edinburgh, but was rejected because he made three dozen pills instead of three only. He is a fellow about 27 or 28; fair, about 5 feet 8 inches, dressed in shabby blue serge, and with a very pronounced Scottish accent. He stated that he was a native of Thurso, and had walked from Edinburgh to London to obtain employment."

SOCIETY OF CHEMICAL INDUSTRY.

We understand that the arrangements for the annual meeting of this Society, to be held in London in July (in the week before that proposed for the British Pharmaceutical Conference), are making good progress. It is proposed that immediately after the London Session of the Society the members shall attend the International Congress of Applied Chemistry to be held in Paris, and already the members of the Society have been circulated respecting a special excursion to Paris. The London members of the committee who are making arrangements for the entertainment of the members are Messrs. Boverton Re wood, W. G. Blagden, Otto Helmer, Rudolf Messel, W. F. Reid, A. Gordon Salamon, Thomas Tyrer, and A. R. Ling (secretary).

MODERN INSTANCES.

Some weeks ago we casually mentioned the case of a Minor candidate who between the practical portion of the examination before the Edinburgh Board and the oral was seized with rheumatic fever. In that condition he presented himself for the oral examination (temperature 104° F. or thereabouts), and was wisely ordered to go home. That young man has been treated as a candidate who has failed duly to attend an examination at the time appointed and has to pay a fee of one guinea when he goes up again. The Edinburgh Board considered the case one of the "unavoidable or proper causes" which are let off with a shilling, but Bloomsbury red-tape demands the guinea. This is bad enough, but it is a fleabite compared with the ease of a candidate who entered for this month's examination. Between the time he paid his fee and the date fixed for the examination, he was seized with an illness and died. Application was made to the Secretary of the Pharmaceutical Society (G.B.) for the return of the fee, but it was refused on the ground that fees are never returned under any circumstances. Perhaps it is because the by-laws do not authorise the Secretary to do so. Well, we mention the fact in order that the committee now revising the by-laws may import a trifle more common-sense into them, and try to save the Society some of the vituperation which even its members make use of when they experience the hardness of cast-iron officialism.

NIPPERS AND MEDICINES.

"Our Military Expert" who writes about the war in the *Daily News* has been giving advice as to the equipment necessary for those going out to the war. After counselling correspondents not to rely too much on nippers, he lets them into a few medical secrets. Permanganate of potash is a thing well worth carrying, as "a very few crumbs dissolved in water makes the strongest Condy's fluid in all its substantial qualities." As finally used, "the coloured water can scarcely be too pale in colour," and is useful for innumerable purposes. A few drops are a safe remedy against most germs, and it is an extremely wholesome thing to have about a room or tent in open vessels, "where there is reason to fear that there may be cause for impurities in the air." The latter contingency, we should think, is very often likely to happen. For dysentery "a certain quantity of castor oil with Fowler's (?) sedative solution of opium" is the best remedy. To avoid malaria care is to be taken to be well off the ground both in sleeping and moving. Balloons or stilts seem to be called for here. Such curiosities show that military experts are by no means experts in medical matters, and involuntarily cause one to heavily discount their military expertise.

ENGLISHMEN are deeply interested in the War, but I doubt if many would go the length of a fellow-countryman who committed suicide in New York the other day because he was worried lest the British would be beaten by the Boers.—(*The Man from London*).

Winter Session.

Notices of meetings to be held are inserted under "Coming Events." If meetings are not attended by reporters, secretaries of associations would oblige by communicating with the Editor.

North-East Lancashire Chemists' Association.

A MEETING of the North-East Lancashire Chemists' Association was held at Blackburn on January 11, to hear an address from Mr. W. S. Glyn-Jones upon the advantages of the Chemists' Defence Association (Limited). There was a good attendance, Councillor Critchley (the President) occupying the chair.

Mr. GLYN-JONES said that one of the reasons which made him glad to visit Blackburn was curiosity as to the North-East Lancashire Chemists' Association, of which they had heard so much. (Laughter.) His first impression was that if other towns of the importance of Blackburn could show meetings of that size and character pharmacy on both its professional and trade sides would be in a very much better position than it was at the present time. He did not think the Pharmaceutical Society had so far recognised the power for good or evil which local Associations might exercise. As to the merits of the Defence Association, it was notorious that it was the minority which joined trade-organisations and which worked and paid to secure benefits of which the whole body of chemists reaped the advantage. Therefore the P.A.T.A. welcomed the opportunity of giving to their members in the Defence Association something to which only members would be entitled.

The CHAIRMAN, in expressing himself in favour of the Association, quoted a case which had come under his own personal observation to prove that expert-knowledge would have been most valuable to the chemist's solicitor.

Councillor SHORROCK (Darwen) observed that, as a member of the old Birmingham Association, he highly approved of the Defence Association, which he should join. A most vexatious methylated-spirits prosecution in which he had been interested might have been avoided had he had the command of the services of a lawyer who understood the Acts bearing upon the matter. As to the patent-medicine business which it was proposed to regulate, he wished it were out of existence. A great mistake had been made in reducing the licence to 5s., and he was of opinion that if it were raised to 2*l.* many of those now selling patent medicines would give them up and allow the rest to make a decent profit.

Mr. HOLT remarked that the defence-scheme was a capital one, but he should like to ask why did Mr. Glyn-Jones give away the position as to the practice of pharmacy as he did on the Pharmaceutical Council?

Mr. R. LORD GIFFORD appreciated the remarks of Mr. Glyn-Jones as to the minority, which had to do the work for the whole body, and if the majority, who took advantage of the work of the minority, would be a little more liberal in their views and a little more tolerant of other workers it would be a good thing.

Mr. GLYN-JONES, in reply, said that Mr. Holt had expressed the opinion that the work of taking up prosecutions should come within the province of the Pharmaceutical Society. He quite agreed that it was the proper work of the Pharmaceutical Society, and he was certain that that Society had not in the past done enough of such work. It would, however, be useful for chemists to have an association that would be able to free the hands of the Pharmaceutical Society in such matters, while there were prosecutions which it would not be to their interests that the Pharmaceutical Society should take up, but which an independent association might take up with advantage. As to the question of

COMPANY-PHARMACY

he should not like them for a moment to think that he was sacrificing the position. The position which he was accused of relinquishing was one which had really never been occupied, owing to the supineness and apparent indifference or incompetence of the men who had constituted

the Pharmaceutical Council for the last twenty years. Certain decisions were given against them, and those of the Council who waited for the members of the Society to lead them instead of leading the trade let the opportunity pass, and were guilty of a breach of trust which it was unfair to suggest that those who came to the Council twenty years too late were responsible for. He was not a man to abandon any position he had the slightest chance of maintaining, and was quite prepared to be one of a delegation from the Society to ask the Government for everything he believed they had the right to claim. But he did contend that in the event of their getting a straight "No," a definite refusal, from the Government they should be prepared to fall back on the next best thing for them rather than let their opponents—Mr. Jesse Boot and his kind—in conjunction with the Lord Chancellor and the Government, make arrangements to suit themselves and not the Society. For twenty years, he was told, the Pharmaceutical Society had been trying to get Bills into Parliament which would remedy that, but he was convinced that no private Bill would stand the ghost of a chance. Their only chance was to get the Government to see their position. If the Government refused, let them not refuse the opportunity to get a good step in advance because they could not have everything they had a right to get. They were in a rather helpless position, but he refused to take the responsibility of giving away something which, through the supineness of the Pharmaceutical Society, they had never possessed. As to Mr. Gifford's remarks about minorities, some of those on the Pharmaceutical Council, as well as in other walks of life, would be very glad if some of the minorities would not be quite so much in evidence. He, himself, had great sympathy with the minority, as unfortunately he found himself in that position almost every month. His experience was that unless a minority was particularly noisy it stood not a shadow of a chance against the majority.

On the motion of Mr. GRIMSHAW, seconded by Mr. PUKNELL, a vote of thanks was accorded to Mr. Glyn-Jones, who, in responding, said it would be well if the officers and members of the Pharmaceutical Council got into touch with Societies like the North-East Lancashire Chemists' Association, and answered the questions which they as members were entitled to ask. He hoped they would give him credit for having his own welfare and that of his brother chemists at heart. Between the position he held and that of the North-East Lancashire Association there was only the difference of a sheet of paper. If the Association did him the honour to ask him to come down and discuss the matter, in public or in private, he should be very glad to avail himself of the opportunity.

Irish Pharmacists' Assistants' Association.

ON January 12 Dr. J. A. Walsh, M.C.P.S.I., delivered a lecture on "Nerves" to the above Association, at the X.L. Café, Dublin. About thirty persons were present, including Mr. G. D. Beggs (President P.S.I.), Dr. J. C. McWalter, and Mr. J. T. Turner, M.P.S.I.

Dr. WALSH advocated the study of the action of drugs upon the body, and particularly upon the nervous system, and urged the necessity for the pharmacist having some knowledge of the arrangement and structure of the nerves, but, he added, he did not intend that such knowledge should be applied to the development of counter-prescribing. Of the usefulness of a knowledge of therapeutics to the pharmacist there could be no question. Most of them could call to mind occasions when they had been handed a bundle of prescriptions by a customer, with the statement that one was for his liver and another for influenza or asthma, but he did not know which was which. He would be a very sorry pharmacist who could not solve the difficulty.

Materia medica and therapeutics were closely connected, and should be studied together. In some of the older works upon materia medica a very good arrangement obtained of grouping together the various drugs according to their therapeutic action. The lecturer then proceeded to describe the appearance of a nerve. Before commencing his medical studies he imagined that a nerve was a kind of vague ethereal substance, not a tangible body: but upon commencing to dissect, and having removed the outer layer of skin and fat, he came upon a number of slender thread-like strings somewhat like fine twine these were nerves

containing an internal nerve-fibre and an outer protective sheath. A slide was then shown of a section of the Atlantic cable, which was contrasted with a section of a nerve. Another slide illustrated the arrangement of the nerves in the body, the spinal cord arising in the brain and terminating in the base of the spine. The spinal cord has a twofold use; it conveys sensory impulses to the brain and carries back motor impulses from the brain. The nerves connecting the cord with different parts of the body are arranged symmetrically on both sides, thirty-one pairs springing from the spinal cord. The spinal nerves were described, the structure of nerves from cells, ganglia—*i.e.*, collection of nerve-cells, and reflex action. Photographs of the brain were shown and described by the lecturer—the cerebellum, the centre for co-ordination of movement; the cerebrum, the centre for judgment, will, ideas, and the higher emotions. A very large brain does not necessarily indicate a high degree of intelligence, but rather the number of markings or convolutions. The cranial nerves were then fully described. The olfactory, the nerve of smell, connected with the nasal mucous membrane; the optic, connected with the organ of vision. The focussing of a camera was contrasted with the changes produced in the eye for viewing distant or near objects. The third, fourth, and sixth nerves are connected with the external muscles of the eye, the fifth with the trigeminus, the seventh with the facial nerve, and the eighth with the auditory. Finally, the structure of the ear was described, with the arrangement for conveying sound-waves.

Dr. McWALTER, in proposing a vote of thanks, stated that after hearing a lecture containing such an immense amount of information delivered extempore, they might well place Dr. Walsh in the front rank of intellectual pharmacists.

Edinburgh Chemists', Assistants', and Apprentices' Association.

A MEETING of the Association was held at 33 York Place, Edinburgh, on January 10, Mr. Fraser McDiarmid (President) in the chair.

Mr. A. P. GRAINGER read an interesting historical résumé on "Cinchona: Its Introduction into Medicine," after which Mr. J. G. MURDOCH read a paper on "An Apprentice's Idea of the Retail Drug-trade." The small number of candidates for the Association prizes had suggested to the author that apprentices in the drug-trade either show a lack of studious habits or are recruited from the dregs of other professions. He finds, however, that it is due to the long hours and the fact that many apprentices have not such an amount of practice in making galenicals as would make them interested in their occupation. Mr. Murdoch did not think the employer was altogether to blame for this, as the making and standardising of certain drugs involved expensive apparatus and much time, which, when expended on small quantities of galenicals, resulted in considerable financial loss. The remedy for this state of affairs was for the apprentice to go over the Pharmacopœia and make small quantities of all the preparations. This, however, would depend on the generosity of his master, and would be an encroachment on the already scanty leisure of the average apprentice.

Some discussion ensued, and the authors of the papers were thanked.

PRACTICAL METHODS OF URINE-ANALYSIS.—That there is a growing importance to the physician and patient that the urine of the latter be analysed is observed in the numerous works on urine-analysis being published and the extent to which in some of our text-books a chapter on urine-analysis is added. That the analysis of urine, from both a chemical and microscopical standpoint, is a legitimate field for the pharmacist is evidenced by the demand for instruction in this particular field. The book before us is a fairly accurate, clear, simple, and practical treatise on this subject. With the exception of those portions treating of the spectroscope and polariscope, it may be said to be useful for the beginner who has no opportunity for instruction. We consider it, however, far more desirable for the analyst, if at all possible, to obtain a course of instruction under a competent instructor and make for himself a series of type slides of urinary sediments, &c.—*Am. Jour. Pharm. (C. & D. office: 1s. 6d.)*.

Pharmaceutical Society of Great Britain.

THE Registrar has furnished us with the following list of those who passed the Major and Minor at the examinations held in London this month:—

MAJOR EXAMINATION.

Nineteen candidates were examined; the following 6 passed:—

Britton, Alfred Brook	Paterson, George Derwent
Edwards, John Griffith	Sykes, Henry Vincent
Normansell, John William	Taylor, Samuel

MINOR EXAMINATION.

Three hundred and fourteen candidates were examined; the following 76 passed:—

Andrew, Thomas Anthony	Jones, Rachel Ellen
Atkins, Sara	Kent, Arthur Stanley
Atkinson, Wilfrid Webster	Kilner, Thomas Charlesworth
Bailey, John Herbert	King, Alfred
Baldwin, Percy Montague H.	Laverack, Ernest Wilson
Bennett, Oswald Edward	Miller, Alfred Edward
Bickford, Harding	Missen, Frederick James
Botham, William	Muscott, Rowland William
Browne, Arthur Hubert	Oldfield, Frederick Charles
Burnett, William	Oxley, Harold George
Butler, George Edward	Phelps, Alfred Henry
Buxton, Henry Arnold	Pickup, Ralph
Collins, Alfred	Pilgrim, Horace Grenville
Coney, Joyce Muriel	Poad, John Edward
Cooper, Thomas	Potter, Herbert
Craven, John Swift	Richards, Ellis
Cree, John Thomas	Ridge, Percy Littlewood
Crook, Thomas	Ringer, Alice Archdale
Davies, William	Roadknight, Frederick Arthur
Deane, Annie Margaret	Roberts, James
Dyson, John Arthur	Robinson, James Dugdale
Earl, Frederick Greenwood	Rowlands, David Roger
Eastland, Thomas Nix	Russell, Joseph Frederick
Ewell, Ernest William	Russell, Robert
Farquhar, James	Sampson, John William
Field, William Joy	Samways, William Edgar
Finn, Francis Dudley	Scattergood, William J.
Freeman, Andrew John	Sharp, Ernest Thompson
Garside, Arthur William	Skerrett, Percy William
Gibbs, Harold Rodier	Sleigh, Frederick Bentley
Greaves, Sydney Chater	Smalley, Charles
Gregson, William Arthur	Theakston, Thomas Walburn
Haddock, John	Thompson, Edwin George
Halstead, Harold Broughton	Tibbit, Leonard Read
Holroyd, Asa	Tonge, Charles Bursall
Hopps, William Thomas	Turner, Levi
Illingworth, Thomas Bernard	Wilson, Francis Maurice
Johnson, Frank	Worth, Arthur James

EXAMINATIONS IN SCOTLAND.

IN the report on examinations in Scotland, to which we referred last week, Dr. G. Balfour Marshall, the visitor, regrets that so few chemists present themselves for the Major. In the Minor there was a slight improvement in the percentage of passes last year, but Dr. Marshall thinks there is not likely to be more improvement until students take more advantage of the existing schools of pharmacy, or until a compulsory curriculum is introduced. Botany is mentioned as the subject to which students give least attention, many showing no practical acquaintance with the subject. The following are the results in the Minor examination:—

Examined, 484; passed, 175; failed, 309—viz., in practical work 175 (€4 chemistry, 41 pharmacy, and 70 in both), botany 50, chemistry and physics 35, materia medica 9, prescriptions 8, oral pharmacy 21, aggregate 17. Dr. Marshall explains that the practice of stopping a candidate whenever he fails in any part of the oral examination makes it impossible to give a percentage of the rejections in each subject. Candidates were examined on the basis of the new Pharmacopœia of 1898, which came into force last January.

NORTH BRITISH BRANCH.

A MEETING was held on January 17 at 33 York Place, Edinburgh, Mr. Peter Boa, Chairman of the Executive, presiding.

In opening the proceedings the CHAIRMAN alluded to the loss which the Society had suffered through the death of Mr. Daniel Frazer, with whom he had formerly been as assistant, and spoke in eulogy of his personal qualities.

The first paper was on

COMMERCIAL MYRRH AND POWDERED MYRRH,

by Mr. G. F. MERSON, F.C.S. He had, he said, been struck by the widely dissimilar characters of the samples of myrrh he had obtained in the ordinary course of business, and, in examining them, he had been unable from official data to say that they were other than what the Pharmacopœia directed to be used in the preparation of the tincture. One sample, on ignition, yielded as much as 15·7 per cent. of ash, over 8 per cent. of which was earthy impurities insoluble in acid. The Pharmacopœia gave, in the case of similar gum resins, asafetida and gamboge, an ash-limit and a spirit-solubility; but there was neither ash-limit nor spirit-solubility in the case of myrrh, galbanum, and ammoniacum. It might be said that no special harm would accrue through the presence of sand and other extraneous matters in myrrh, but that would equally apply to gamboge and asafetida, yet these substances were safeguarded from adulteration. Mr. Merson submitted the following tables, representing the approximate composition of twenty-five samples he had examined:—

TABLE I.

Lump.

No.	Trade-description	Per Cent. Soluble in 90-per- cent. Alcohol	Per Cent. Total Ash	Per Cent. Soluble Ash
1	Sorts, parv. com. ...	33·0	15·7	7·6
2	" " elect. ...	35·2	9·8	4·6
3	" " opt. ...	35·6	6·4	4·4
4	" " pld. ...	35·9	8·3	5·5
5	" " ...	37·8	4·5	4·11
6	Elect., " elect. ...	38·7	3·0	2·69
7	Sorts, " opt. ...	39·4	3·3	2·16
8	" " elect. ...	39·5	3·4	3·38
9	Elect., 30 years old ...	40·0	2·7	2·77
10	Sorts, parv. elect. ...	45·7	3·4	3·3
11	Elect., medium ...	48·3	2·8	2·4

TABLE II.

Powder.

No.	Trade description	Per Cent. Soluble in 90-per- cent. Alcohol	Per Cent. Total Ash	Per Cent. Soluble Ash
12	Pulv.	33·8	7·53	4·98
13	" opt.	36·8	9·20	5·30
14	" elect.	38·0	12·90	7·20
15	"	38·2	10·84	6·24
16	" elect.	38·4	5·70	4·37
17	"	38·8	13·15	6·51
18	"	39·1	8·10	5·40
19	" elect.	40·6	9·40	6·00
20	" No. II.	41·0	9·65	4·90
21	" extra elect. ...	42·1	5·00	2·90
22	" No. I.	43·4	3·90	3·76
23	"	46·5	3·50	3·10
24	"	46·6	5·70	3·80
25	"	47·1	3·50	3·10

In these tables a certain relationship would be noticed between the percentage soluble in alcohol and the quantity of total ash present. The higher the yield of spirit-soluble matter, the lower the percentage of ash, and, with the exception of the first four samples, the total ash was prac-

tically all soluble in dilute hydrochloric acid. Differing from K. Dietrich in his *Year-book*, 1899, he thought 10 per cent. as the limit of ash allowable much too high, even for powdered myrrh.

Summarising his results Mr. Merson said—(1) myrrh is easily obtainable of good quality, and is not adulterated to any extent except by the inclusion of earthy matter, which can be readily removed by sifting; (2) the normal ash in good sorts does not exceed 5 per cent., which should be almost entirely soluble in dilute hydrochloric acid; and (3) 1 grammie, when exhausted by 90 per cent. alcohol, should leave a residue which, when dried at 100 degrees C., should not weigh more than 0·60 grammie. Mr. Merson followed this with a paper on

TINCTURE OF MYRRH.

The investigations, the results of which were given in this paper, were, Mr. Merson said, undertaken to see whether any special reason existed as to why tincture of myrrh, which was made by maceration and percolation in the 1885 edition of the Pharmacopœia, should revert to maceration only.

The results were tabulated as follows:—

No. of Powder	Sp. Gr. at 60° F.	Maceration.		Percolation.	
		Resin Un- dissolved	Per Cent.	Sp. Gr. at 60° F.	Resin Un- dissolved
20	.85044	8·2	85120	3·4	
30	.85090	3·7	.35182	1·5	
40	.85192	1·3	.35250	0·0	

This showed that percolation gave distinctly the better tincture. Not only was the sp. gr. higher than that of the tincture made by maceration, but the percentage of undissolved resin in the exhausted marc was considerably lower. The time taken to finish the tincture was inside of twenty-four hours, as against seven days—an obvious advantage. Solution of the resinous principle of myrrh was so rapid that a percolator should be chosen relatively large compared with the bulk of powder to be operated on, so that the tendency to clog, which was troublesome when using No. 40 powder in a long column of marc, might be obviated. The depth of powder in the percolator should not be more than twice the diameter of the lower part of the percolator. If No. 30 powder were used there was no trouble with clogging. Colour gave no indication of the gravity of the tincture, or of anything in inverse ratio. High-coloured tinctures were made from inferior grades of myrrh. The sp. gr. of one dark sample he found to be .8474, while the figure for a standard tincture should not fall below .850.

In the discussion which followed Mr. DOTT said the paper was a true contribution to pharmaceutical knowledge. Tests like those undertaken by Mr. Merson were a very valuable means of determining the genuineness or otherwise of drugs not otherwise easily determined. He thought with Mr. Merson that percolation was a better method than maceration, and, where it was permissible and practicable, should be preferred to maceration.

Mr. INNES FRASER agreed. He considered Nos. 16 to 20 as an average coarse powder. He found that the price regulated the quality very much.

Dr. COWELL corroborated what Mr. Dott said with regard to the value of the paper. Personally he had never attempted to percolate tincture of myrrh, owing to his unwavering loyalty to the Pharmacopœia, although there were many inconsistencies in it; and he found that, when people got something better than previously, they complained because it was not exactly what they had before. (Laughter.)

Mr. COWIE also thought this sort of work did more good than a great number of papers on the finished product, such as tinctures. If the crude drug were correct, so would the finished drug be.

Mr. C. F. HENRY said, with regard to commercial myrrh and powdered myrrh, they should not believe in names till they had proved the article to be what was represented. The results of Mr. Merson's calculations of tincture of

myrrh, to his view, were a little startling. It was against theory to percolate certain substances, and Mr. Merson must have worked with pretty pure samples.

Mr. GLASS said the main point of the paper was the fineness of the powder used. With 40 powder it was nearly exhausted by maceration, and if they could get a finer powder he supposed they could get it down to zero altogether.

Mr. J. R. HILL read extracts from apologies of members containing observations on the subject. One member objected to the vague expression "coarse powder." Why, he asked, should myrrh be in coarse powder whilst kino was left in a still more vague condition, powder, and asafoetida bruised? Why not be accurate and consistent, like their brothers over the seas? The U.S.P. definitely stated that coarse powder was 20 powder; there seemed to be no uniformity as to what was meant. Mr. Lanan said one in ten would have been better, because for all purposes for which it was used full strength that was strong enough, and much less liable to give elots of resin when mixed in gargles, and it could be more thoroughly extracted by menstruum, being less dry, the proportion of solvent being greater. The public did not see any difference between the new tincture and the old, and wondered why they should be charged eightpence for the new and sixpence for the old. Mr. Dunlop (Glasgow) wrote that he preferred percolation to maceration. He had beside him five tubes showing the graduation of exhaustion of myrrh, from which it appeared that it was practically exhausted when four-fifths of the menstruum had been added. For himself, Mr. Hill remarked on the enormous amount of work involved in the preparation of the paper.

The CHAIRMAN, referring to Mr. Fraser's remark about price regulating quality, said there were people who were anxious to use kinds of myrrh which would not command a high price. The fineness of the powder was not important, because in a fat myrrh the resin was in such a soft condition that it dissolved rapidly, whereas in a myrrh of the sorts variety the resin was much more compact, and did not lend itself to solution with the same facility. Hence he inferred that the Pharmacopœia, in being indefinite, had a purpose in view in leaving it to the discretion of the operator to suit the fineness of the powder to the quality of the myrrh. One thing that occurred to him, in view of Mr. Merson's paper, was that the percentage of resin in some books on *materia medica* would require to be revised. He fancied that the Pharmacopœia adopted the maceration-process in making tincture of myrrh for this reason, that unless percolation was carried out by one who understood it, and could do it justice in such a subject as myrrh, the results might be much more varied than by maceration.

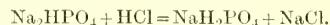
Mr. MERSON having replied, he was accorded a vote of thanks for his papers.

Mr. J. RUTHERFORD HILL then read a paper on

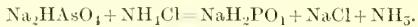
STRYCHNINE HYDROCHLORIDE AND SODIUM ARSENATE,

supplementary to that read by Mr. Dunlop at the last meeting, in which he suggested that the precipitation of strychnine in his mixture was due to sodium oxide as a contamination in the sodium arsenate. Mr. Hill said in view of the process for making sodium arsenate, sodium oxide as an impurity was improbable. Drying at 300° F. would not produce it; moreover, he had found that the crystallised salt $\text{Na}_2\text{HAsO}_4 \cdot 12\text{H}_2\text{O}$ caused precipitation the same as the dried salt, and there could be no sodium oxide in the crystals. The official liquor sodii arsenatis was only faintly alkaline at ordinary temperatures. Mr. Dunlop found at least 0.5 gr. of strychnine precipitated from $\frac{1}{2}$ oz. of the solution. The sodium arsenate would have required to be contaminated with the hydro-oxide to the extent of 2.75 per cent. to cause such a precipitation, and that would give a very distinct alkaline reaction. Mr. Hill proceeded to consider, among other suggestions in Mr. Dunlop's paper and the discussion which followed, that the salt contained some sodium carbonate and that this explained the precipitation, and also that sodium arsenate underwent partial hydrolysis in aqueous solution, and that the faint alkalinity and precipitation of strychnine were due to the NaOH thus produced. Ostwald and others supported the latter theory. When Na_2HAsO_4 was added to a solution of NH_4Cl , there was no immediate evidence of free ammonia. But, if the solution was allowed to stand, free

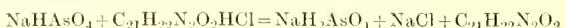
ammonia was plainly perceptible, both to test-papers and by smell. The varying evidences of sodium oxide which Mr. Dunlop said he got with HgCl_2 might be due to differences in concentration of the solution, in the time it had stood, and in the temperature, all of which would affect the degree of hydrolysis and the percentage of free NaOH. The observations of others favoured the theory that sodium phosphate and arsenate in aqueous solution did undergo hydrolysis, and that the tendency was to separate into the dihydrogen phosphate or arsenate and sodium hydroxide. They tended also to suggest that the precipitation of strychnine was not due either to sodium carbonate or sodium oxide, but to free NaOH resulting from hydrolysis. He came to the conclusion, after estimating the strychnine precipitated, that the hydrolysis theory was not an adequate explanation of the facts. A consideration of Thomas's researches with Na_2HPO_4 suggested what seemed the true solution of the problem. In his critical experiment the reaction evidently was as follows:—



It seemed probable, too, that free NH_3 was given off when solutions of Na_2HAsO_4 and NH_4Cl were boiled together, thus:—



It did not then seem necessary to assume that there was any prior hydrolysis in aqueous-solution. Doubtless there seemed to be some, but it was unimportant. It was well known that mineral acids in combination with alkaloids behaved like free acids towards the fixed alkalies. The instability of the Na_2HAsO_4 in solution, and the loose attachment of the HCl in the strychnine hydrochloride, resulted in a double decomposition explained by the following equation:—



An analogous experiment with a 1-per-cent. solution of quinine hydrochloride and sodium arsenate solution gave an immediate precipitate, almost making the liquid solid because of the bulky quinine hydrate thrown down.

Mr. DODD thought Mr. Hill's conclusion as to the precipitation of strychnine was correct, and that it was not due to any slight hydrolysis of sodium arsenate. They were a little inclined to regard alkaloids as a much stronger basis than they really were; the analogous diabasic phosphate of strychnine was very unstable. He doubted very much if a tribasic arsenate or phosphate of an alkaloid really could be formed.

Mr. DUNCAN said he could not discuss such a paper as this without having done the work himself. Personally, he was still in favour of the hydrolysis theory. He never dreamed of the reaction between hydrochloride and strychnine arsenate, and he was inclined to think it largely depended on the liberation of strychnine by hydrolysis in the salt.

Dr. COULL said that, assuming that the results submitted were correct, he was now satisfied that the presence of carbonate, which he suggested as the reason at the last meeting, was incorrect.

Mr. COWIE said that since last meeting he had done a little work on this subject, and he confirmed what Mr. Hill said with one or two exceptions. With the solution of strychnine suggested by Mr. Cockburn at a former meeting he got no precipitate whatever, but, on closer examination, he found the solution distinctly acid. He made some with hydrochloride of strychnine, and, on mixing, he found it took a few hours to precipitate, and when it did it gave long silky crystals. He made an aqueous solution of the same strength, and mixed it with arsenate, and found that precipitation took place immediately, but that the crystals were not nearly so long. After it stood for a day he found crystals beginning to form similar to those he had seen in Mr. Hill's mixture. He thought probably those silky crystals were due to excess of acid in the hydrochloride, and he shook up the solution with chloroform, and found that in both cases the whole of the strychnine was removed, so that it could not have been chloride. His results regarding the phosphate were the same as Mr. Hill's.

After some remarks by the CHAIRMAN, Mr. HILL replied, and a vote of thanks was passed to him for his paper.



TO CORRESPONDENTS.—Please write clearly and concisely on one side of the paper only. All communications should be accompanied by the names and addresses of the writers. If queries are submitted, each should be written on a separate piece of paper. We do not reply to queries by post, and can only answer on subjects of general interest.

About the Alkaloids.

SIR,—In his article on the "Alkaloids" contained in the "Encyclopaedia Medica," at present being published, Dr. Lockhart Gillespie states that morphine is "excreted unchanged." This statement needs, I think, considerable qualification. In cases of opium-poisoning morphine is certainly sometimes found in the urine, but not, I think, by any means in all cases. It will, I believe, be most often found where the physiological effects have been most marked. Hence one is inclined to infer that the alkaloid must be decomposed in the blood in order to produce its most characteristic results.

Yours truly,

Dublin, January 6.

J. C. MCWALTER.

Chemists and their Customers: Interesting Decision.

SIR,—Under the above heading a cutting from a London newspaper has been sent me by a friend, with the remark that it might interest me. It did interest me very much, and, though I saw the case reported in the *C. & D.* of last week, and also the Editor's remarks thereon, I waited till this week to see if any notice would be taken of the matter. As it has not called forth any remarks, perhaps you will be able to ask the question which the case referred to naturally suggests—"Is there any authority which makes the B.P. the legal standard for all preparations, simple or compound, mentioned within its covers?"

I have always understood there was such—else, why so many prosecutions!—but, from the decision given at the West Ham Police Court, on January 3, on the compound rhubarb-powder sale, it appears not, and according to such decision it will now be easy for anyone to sell any compound prepared in any way, so long as he states it is not B.P.

It appears to me to be a most extraordinary position to be in at this time of day, and one that will very soon lead to considerable abuse. It is high time we knew how things stand, and if the B.P. is not a legal standard, the sooner it is made so the better.

Yours, &c.,

Glasgow, January 15.

WILLIAM L. CURRIE.

[We comment upon this matter on page 97.—ED.]

Crystallised Glycerin.

SIR,—I have pleasure in noting a most unusual phenomenon occurring in the storage of glycerin during cold periods. A customer of my firm has two copper tanks, holding half a ton each of glycerin, into which a delivery of a ton was made last November. The glycerin in one of the tanks has now deposited about 5 cwt. of crystals which at first were a cause of alarm, but which on examination proved to be pure glycerin.

Any chemist interested in this phenomenal crystallisation may have a sample sent, such as I have directed to you, on remitting cost of stuff, package and postage (say 1s. 6d.) to Alison, Johnson & Foster (Limited), Hull. It is perhaps fair to add that this crystallisation is recognised by most chemists as a proof of absolute purity.

Hull, January 16.

FRED. E. JOHNSON.

This is the first sample of crystallised glycerin we have seen since 1895. In the *C. & D.*, March 30, 1895, page 469, will be found interesting particulars of the sample we then received.—ED.]

Chemists and Fictionists.

SIR,—I observe that two or three gentlemen have remarked on my last letter on the above subject. I regret that they appear to consider the attitude of fictionists in regard

to pharmacy trivial and unimportant. I am of an altogether different opinion, and I think if these gentlemen will think seriously of the matter under discussion they also will change their opinions. I consider the educating-propaganda to which I referred before quite as important at the present time as the agitation for fresh legislation, and, in fact, I doubt if the various factors connected with our case are sufficiently educated, in regard to pharmaceutical matters, to afford us a reasonable hope of getting legislative justice meantime. The position of these fictionists forms only one item on the programme to be dealt with educationally, but it is certainly not an unimportant item. The silly idea of a chemist having 250 per cent. profit on his goods has done pharmacy more harm than all the drug-store men and quack-medicine men ever have, or ever can do. Nobody who studies the pharmaceutical problem can fail to see that nearly all the public prejudice against chemists is traceable to this absurd idea. These petty writers are unable to rise above the miserable witticisms about a chemist having 11d. profit on the shilling. Their ignorant attacks on a class of men who have given proof of education cannot possibly be too severely dealt with. That these attacks do affect us is shown in our law-courts, in our Government offices, and in the street crowd. It is not so long ago since a prominent Judge, in giving an adverse and very unjust decision, based the decision on the assumed fact that chemists charged such tremendous profits that they needed to be kept within reasonable bounds. The Government, also going on the same supposition, have hampered and harassed us with patent-medicine laws of such a nature that we are hardly safe in selling a pennyworth of Gregory's powder without affixing a threepenny stamp to it, and the general public are so impressed with this idea that they will rather go to grocers, drapers, and oil-merchants than to chemists. "Xrayser" (for whom I have the utmost respect and admiration) says "we only share the fictionist's satire with kings, bishops, statesmen, and lawyers." Here "Xrayser" is entirely wrong. Whilst fictionists do occasionally paint an individual from any one of these classes as either wicked or absurd, it is much more common to heroicise him. In no case does the fictionist attack a whole class as he attacks chemists. I fancy "Xrayser" cannot point out a single instance in modern literature of a chemist being heroicised, or, indeed, spoken of in anything but language of contempt and abuse. I can point out many cases in which the chemist has been attacked as an individual, and in which chemists have been attacked as a class. I gather, from "Xrayser's" remark about the name Guthrie, that Mr. Anstey is a Scotchman. I do not care if he is an Archangel (which is very far from being the same thing): he must not prejudice the case of men fighting honourably for liberties which have been denied to no other class placed in the same circumstances. Mr. Barnes (in his excellent letter) refers to Marie Corelli. I do not wish to say anything about her, in the first place because—well, because she is Marie Corelli, and, in the second place, because a little extravagance of language is allowed in the case of a lady. It is ours to teach such writers better manners, and it is within my knowledge that some of them, at least, have read what has been published in the pages of the *C. & D.* recently on this subject, and I am not without hope that they will "tak' tent and mend." Chemists only need to know their own strength. We number many thousands in this country, we belong distinctly to the reading-class, and if we do not give these men a Roland for an Oliver when it is necessary to do so we have ourselves to blame.

Dumfries, January 15.

JAMES REID.

Army Pharmaceutical Service.

SIR,—Quite so; only this time it has happened as might have been reasonably expected. My own hurriedly-written letter of September 30 and your article of the previous week were at any rate preliminary warnings, and had anyone shown interest in the question I mainly touched upon—namely, the status of military pharmacists—and quoted by Mr. Smith, of the Queensland Volunteers, I would have expressed further opinions, and my reasons for such. They have funny little ways in the Army occasionally, as any reader of *Truth* may see for himself, and the habitat of that sick-leaved perennial known as the official humourist is the district "hard by the little village of Charing" as the

historical novelist hath it. Now, it is no use crying—the apparently studied insult offered by the authorities to pharmacy has been enthusiastically received by a large number of men whose "Rule-Britannia" sentiments temporarily overcame any slight patriotic feeling they may have entertained for their calling. As far as they are concerned, they will all be the better men for that short term of military discipline and diet which I hope will soon be made compulsory for every man. We cannot altogether help sympathising when we contrast their inglorious and deluded position with the magnificent fêting that has been accorded to the rank-and-file of the C.I.V. It is, indeed, singular, and almost funny under the circumstances, to read your announcement that the first recipient of the new French degree of "Doctor in Pharmacy" holds a commission as pharmacist in the French Army.

I am, Sir, faithfully yours,

London, N.W., January 24. T. MORLEY TAYLOR.

SIR.—Following up my letter of last week a'nen't the disgraceful action of the authorities regarding the chemists who have volunteered for service in South Africa who have related their unfortunate experiences through your influential journal, will you permit me in a friendly way to ask you to "toe the line" and explain the last clause in your editorial of to-day, which reads: "While we cannot agree with the suggestion that pharmaceutical volunteers should be treated as commissioned officers, *as that would be inconsistent with the regulations of the Corps* as at present constituted, we submit that they should take rank with sergeants!"—the italics are mine. The position which I take up in this matter is that, as you know, the compounding in the Army has hitherto not been a qualified chemist, and that now, when the authorities deem it expedient to draw their compounders from the only legitimate source, surely, this being so, and being, I believe, the first time in their history they have done so, it is the proper time for putting the compounding on what should be his proper position is the present time. This makes your attitude in the matter incomprehensible—to me, at least—as I take it that the average chemist is as much a gentleman and should enter the Army as a lieutenant.

Yours faithfully,

January 13.

L.P.S.I. (231/61.)

[We had solely the present time in view when we said that we could not agree that the chemists' assistants who have enlisted should be treated as officers. This is not the time, when the country is in sore straits, for pharmacists or anybody else to pause until the regulations are reformed to suit them, but there is every reason why those who have accepted service as compounders should demand the rank required by the regulations—viz., that of sergeant. That is not unpatriotic, and it is business.—ED.]

Liquor Bismuthi.

SIR.—I fail to see what grounds Messrs. Catford and Cowley can find in my previous letter for charging them with plagiarism, considering that their methods differ so completely from my own, and the opening sentence of my letter contains a full recognition of the exhaustive character of their work. To their *tu quoque* I reply by referring them to your issue of March 18, 1899, giving nearly a column of my Newcastle paper, instead of the six lines in the issue of March 11. In preparing that paper I consulted all the available literature at my disposal on the subject, and, whilst noticing that Mr. Umney had pointed out the deficiency of citrate in the B.P. formula (mentioned in THE CHEMISTS' AND DRUGGISTS' DIARY, 1899), I had not observed any previous reference to the deficiency of potass. carbonate. Not having a copy of Mr. Umney's article in my possession, I am unable to state whether or no he pointed out the latter deficiency.

The method described in my Conference paper did not attempt to remedy the deficiency of citrate in the B.P. formula: its aim was to ensure the formation of a soluble precipitate, and this aim it fulfils. I would be glad to know if such a result has ever been obtained by strict adherence to the B.P. directions. MacEwan's paper, published in 1883, could not possibly refer to the 1898 B.P. process [which is a modification of MacEwan's,—ED.]. If Messrs. Catford and Cowley use a potassium citrate of less purity than the B.P. demands (98.33 per cent.) as a minimum, the deficiency of

bismuth in the finished product will be proportional to the extent of this lower purity; and as absorption of moisture, owing to its hygroscopic nature, will be the most frequent cause of deficiency in potass. citrate, all that is required to remedy this will be to use a dry salt. With regard to the quantity of B.P. potass. carbonate (84 per cent.) required to neutralise the excess of nitric acid, assuming the citrate to be 100 per cent., 70 grammes of bismuth oxynitrate require 28.95 grammes real HNO₃ to form the true nitrate. The B.P. uses 50 c.c. of 70-per-cent. HNO₃—equal to 49.7 grammes of real HNO₃—leaving an excess of 20.75 grammes, which require 22.76 grammes of real, or between 27 and 27.1 grammes 84-per-cent., potass. carb. for neutralisation, an excess of from 7 to 7.1, and not 8.5 grammes. I did not determine the quantity of bismuth in the washings or finished product, but made comparative tests with H₂S water on the relative quantities of bismuth in the washings, and found them almost *nil* when the increased quantity of carbonate was used.

I have never suggested that reversal of order of mixing will remedy deficiency of citrate, but it will ensure that the precipitate formed will consist of soluble citrate, and not a partly-soluble and variable mixture of citrate and oxynitrate. I presume Messrs. Catford and Cowley will admit that the order of mixing is a not-to-be-neglected factor, especially in cases where there is a tendency to produce basic salts.

Yours faithfully,

Newcastle-on-Tyne,

January 16.

FRANK R. DUDDERIDGE.

Miscellaneous Inquiries.

We endeavour to reply promptly and practically to trade questions of general interest, but cannot guarantee insertion of replies on a particular date, nor can we repeat information given during the past twelve months.

185/16. Almanac.—There is a good deal of the historical side of vegetable *materia medica* in the "Pharmaeographia," from which you might cull many interesting facts for your almanack articles.

206/72. Benoni.—(1) The Powder for Washing Birds is powdered soap. This seems to be the usual thing for the purpose. The directions sent by "Benoni" are "a teaspoonful of the powder to be added to half a pint of boiling water, and the solution, when moderately warm, to be applied to the plumage with a shaving-brush. The lather formed is to be washed off by tepid water." (2) The Mixture for Horses which is "always found most effective for colds and as a pick-me-up" consists of—

Liq. ammon. aromat.	...	...	5j.
Pot. nit.	...	...	5ij.
Aq. ad...	...	...	Oss.

This is one dose, and is given mixed with bran.

221/46. Ulexine.—You will find all about glycerin-tinctures in our "Pharmaceutical Formulas," page 624. We presume you have the book.

217/72. Chemicus.—The Secretary of the Sanitary Institute, Margaret Street, W., will supply the information you require about the Sanitary Inspectors' examination.

Information Wanted.

Postcard replies to any of the subjoined inquiries will be esteemed.

230/57. Where can Munday's "Pickwick Perfume" be obtained?

229 9. What is "Modday" varnish, and where can it be obtained?

233/27. Where to obtain Professor Fowler's Medical Book? It circulates in the U.S.

234/14. Address of the Willard Bell Truss Company.

234/27. Who are manufacturers of steam-vaporisers for the face?

Trade Report.

NOTICE TO BUYERS.—The prices given in this section are those obtained by importers or manufacturers for bulk quantities or original packages. To these prices various charges have to be added, whereby values are in many instances greatly augmented before wholesale dealers stock the goods. Qualities of drugs and oils vary greatly, and higher prices are commanded by selected qualities even in bulk quantities. It would be unreasonable for retail buyers to expect to get small quantities at anything like the prices here quoted.

THE chief feature this week has been the proclamation prohibiting the export of phenols, picric acid, cresols, and other coal-tar products (see page 84). It places the German makers of salicylic acid and salicylates in an awkward position, as they are dependent on this country for much of the raw material. Pending the drug-actions business has been quiet, although the wholesale druggists are very busy owing to the influenza epidemic. Speculation in quinine is going on as merrily as ever in spite of makers' efforts to curtail it. The small bark-shipments from Java for the first half of this month were responsible for 1d. advance in second hands on Wednesday. At the Cinchona auctions on Tuesday an advance of 5 per cent. was recorded, but the auctions were small and had no appreciable effect on the quinine-market. In heavy chemicals the chief advance has been in caustic soda, which is 10s. dearer; hyposulphite is also scarce. The following table deals with all the changes since our last report:—

Higher	Firmer	Easier	Lower
Cardamoms	Acid, citric	Copper sulphate	Aloes, Cape
Cinchona	Cascareilla		
Ferri et quin.cit.	Gum myrrh	Ipecac. (Cart.)	
Oil, linseed	Kola-nuts		
Oil, palm	Oil, castor		
Oil, turpentine	Oil, olive		
Quinine	Oil, rape		
Salicin	Shellac		
Soda caustic			
Soda nitrate			

Arrivals.

The following drugs, &c., have arrived at the principal ports of the United Kingdom, from January 11 to 17, both inclusive:— Aloes (Aden), 10; annatto, 28; areca nuts, 117; benzoin 95; camphor, 281; camphor oil, 95; cardamoms, 234; cinchona (Ceylon) 70, (E.L.) 632; citronella oil, 69; cochineal, 59; colocynth, 12; conch-grass, 67; croton-seed 14; cumin-seed 54; fennel-seed, 2,761; galla (Chinese), 171; gentian 45; gum arabic (Aden, 85; gum obilanus, 23; gum thus, 250; honey (Aust.), 28; kolas, 5; lemon-grass oil, 26; lemon-juice, 32; lime, citrate, 23; lime-juice, 22; menthol, 25; mixt vomica, 146; opium, 251; senna (Tinny.), 756; turmeric, 101; saffron, 2; soy, 98; vanilla, 4; wax, bees, 50; wax (Japanese), 100.

Heavy Chemicals.

[These prices are for market-centres other than London.]

The very firm tone now for some time past noted as the leading feature of the heavy-chemical market still continues, and prices all round are exceedingly well maintained. The general demand keeps very good, especially from home consuming trades, causing manufacturers' stocks to continue on the low side.

ALKALI-PRODUCE.—Articles under this heading continue to move well at practically unchanged rates.

SULPHATE OF AMMONIA is quiet but firm. Beckton, 11l. 10s. to 11l. 12s. 6d.; Beckton terms, 11l. 7s. 6d. Hull, London, and Leith all stand at about 11l. 10s. Exports from Leith last week amounted to 658 tons.

ALUMINA PRODUCTS are in general good consumptive demand at prices tending upwards from the low figures which have ruled for some months. White sulphate of alumina, purest makes, practically free of iron, moves well at 85s. to 90s. per ton on rails in casks with usual allowances for bags or loose slabs. Crystal

alum firm; ground, 57. 5s. to 57. 10s.; lump in tierces, 4l. 17s. 6d. to 5l.; and loose lump, 4l. 12s. 6d. to 4l. 17s. 6d., all per ton in bags free on rails. Aluminous cake, 47s. 6d. to 52s. 6d. per ton; alumino ferric, 42s. 6d. to 47s. 6d. per ton; sewage alum, 45s. to 47s. 6d. per ton all on rails. Bauxite, 60-per cent. alumina, 16s. 6d. to 17s. per ton, f.o.b. Hydrate of alumina of highest percentage meets with fair demand at 11l. 10s. to 12l. per ton in casks. Aluminate of soda, highest strength Al_2O_5 , 37s. 6d. to 40s. per cwt., according to quantity. Chloride of aluminium, 11l. to 11l. 10s. per ton in barrels free on rails. Carbonate of alumina, 35s. to 37s. 6d. per cwt.

BICHROMATES are still scarce, and meet with brisk inquiry. Nearest prices are about 34d. to 4d. per lb. for bichromate of soda, and 4½d. to 5d. per lb. net for bichromate of potash.

SULPHATE OF COPPER is easier again at about 23l. 15s.; Liverpool, 24l. 10s.

BORAX.—Quiet. Crystals, 16s. 6d. per cwt., and 17s. 6d. per ewt. for powdered. Boracic acid, 25s. 6d. and 27s. 6d. per cwt. respectively.

SALT-PETRE.—British refined, 21s. and 22s. per cwt. in barrels and kegs respectively; German barrels, 18s. 9d.; kegs, 19s. 6d.

SAL AMMONIAC.—First and seconds unchanged at 40l. and 38l. per ton.

PITOSPHORUS.—Without alteration Welges, 2s., and sticks, 2s. 1d. per lb.; amorphous, 2s. 6d. per lb.

Liverpool Market.

Liverpool, January 17.

Castor oil.—The market is decidedly stronger, with numerous sales at 3d. per lb. Many buyers at 2½d. per lb., but no sellers. **Quillaja-bark.**—14l. is asked in some quarters, but 13l. 10s. per ton would be taken for quantity. **Chillies.**—A lot of 50 bags rather inferior Sierra Leone sold at 40s. per cwt. **Ol. anisi.**—5 cases were offered at auction, and bought in at 6s. per lb.—**Wax, Carnauba.**—Fair yellow has sold at 70s. to 71s. per cwt.; inferior yellow, 62s.; medium quality, 57s. 6d.; and 21 bags grey Cerea at 45s. **Honey.**—Chilian has been in steady demand, business including 70 barrels Pile I. at 24s. to 25s., and 40 barrels Pile II. at 22s. 6d. per cwt.

German Drug Market.

Hamburg, January 16.

Business is not very lively, and there are few changes to report. **Aloes (Cape)** is very firm and scarce, at 66m. per 100 kilos. **Balsam Peru.**—Easier, at 14½m. and 14¾m. per kilo. **Camphor (Refined).**—Quiet, with second-hand sellers at 385m. per 100 kilos. **Ergot of Rye** is very firm and scarce, the stocks here are nearly exhausted; 525m. per 100 kilos. has been paid, and 530m. per 100 kilos. is now asked to-day. **Lycopodium** shows a strong market; offers from Russia are very high, and the spot quotation is 425m. per 100 kilos. **Ipecacuanha (Rio).**—A few bales recently arrived have sold at 27m. per kilo. **Quinine** is decidedly firmer, first-hand at 45m., second-hand at 44m. per kilo. **Cevadilla-seed** is firmer, as no new supplies have arrived; spot-price, 90m. per 100 kilos. **Caraway-seed** is very firm, at 53½m. per 100 kilos. **Kola-nuts** firmer, at 50m. per 100 kilos. **Spirit of Turpentine** is very firm; spot sold to-day at 77m. and 77½m. per 100 kilos.; February demand, 78m. **Worm-seed** is dearer. The small stocks are partly bought up; to-day's quotation is 55m. per 100 kilos. **Oils.**—New season cod-liver oil was offered to-day at 75m. per barrel; cotton-seed oil, linseed oil, and rape oil advancing. Caraway oil very firm, at 10¼m. per kilo. Sandalwood oil advancing, present price, 24m. per kilo.

American Market.

New York, January 9.

The market continues to show a steady improvement in all directions. The undertone is firm, and values favour holders. **Aconite-root** is in light supply, and limited quantities only are obtainable at 16c. to 17c. **Beeswax** has sold largely for export, and supplies are somewhat light. Demand is good and values firm, at 29c. to 30c. for ordinary pure. **Ergot** is active and has sold largely at 55c. to 56c. for German. Quotations are now 60c., and the tendency is upwards. **Golden seal** (*Hydrastis*) is reported firmer at growing centres, and spot quotations have advanced to 62c. **Opium** is dull, and quotations have nominal at \$3.20 to \$3.25. For case lots \$3.17½ will buy. **Tyrogallic acid** has advanced to \$2.55. **Quinine** is quiet but strong, in sympathy with foreign markets. Manufacturers still quote 30c. to 32c., but offer sparingly. Supplies in second hands are small and unobtainable below 30c. **Sarsaparilla** (Mexican) is quiet and selling in jobbing quantities at 10c., pending arrival of new supplies. **Sassafras-bark** is scarce, and firm at 12c. **Seneca-root** is firmer, and in better demand. Southern is quoted at 45c. and Western at 50c. **Senna-leaves** are in light supply and firm. Timmerville is held at 12c. to 20c., according to grade, and Alexandrian natural at 12c. to 15c. **Valerian rhizome.**—A decline in Belgian has been followed by a reaction, and 9c. to 10c. is now asked.

Messina Market.

Our correspondent, writing on January 14, says that an early advance in the price of *Lemon oil* is expected, but he thinks it will not go high, as owing to the great demand for lemon-juice the quantity of oil extracted is exceptionally large. On the other hand the stocks of *Orange oil* are shrinking, and the lowest price out there (6s. 10d. per lb.) will not stand long. *Oil of Bergamot* is depressed, and the low limit of 5s. 10d. to 6s. per lb. for 38 pr cent. has been touched. Our correspondent believes this to be bottom price.

Otto of Rose.

(From a Kezanlik Correspondent.)

Owing to the low prices in August-October, 1899, almost all the pure otto in the hands of the peasant-distillers was bought up, and now there are about 350 kilos. pure otto in the hands of the Kezanlik dealers and about 150 kilos. in Karlovo. There is some more otto in the villages (Alexandrovo, Brazigovo, Kahmanlari, &c.), altogether about 150 kilos. In spite of this large quantity prices are about 10 per cent. higher than in October, owing to the rumour that the Government intended to convert the otto-of-rose industry into a monopoly, so as to stop adulteration of the otto. The distillers and exporters of pure otto are against this measure, which they believe to be a mere pretence for getting more taxes. Last week there was a discussion in the Parliament in Sophia regarding the Bulgarian industries generally. When the distillers learned about the intention of the Government, some of them sent a petition to the deputy of Kezanlik, Mr. Theo Shipkoff, encouraging him to defend the rose-industry from being sold as a monopoly. Mr. Shipkoff thereupon made a long speech in Parliament regarding the rose-industry, advising the Government, instead of making the industry into a monopoly, to arrange a special law making the adulteration of otto by distillers or exporters a criminal offence. He argued that would be the only way to place the Bulgarian rose-industry in the highest position in the West. I hear from some distillers that Mr. Theo Shipkoff is preparing a special law dealing with the whole question of otto-adulteration, and it is to be introduced during the next session of Parliament, which begins in October. (234, 17.)

Cablegrams.

HAMBURG, January 18, 11.45 A.M.:—The firm tendency of this market, noted in my letter, continues. Refined camphor is still selling at 385m. per 100 kilos. quinine at 44 $\frac{1}{2}$ m. per kilo., and ergot of rye has reached 550m. per 100 kilos.

* * * *

NEW YORK, January 18, 3.3 P.M.:—Business on this market is active. Opium, however, is quiet, \$3.15 per lb. being the latest price. Domestic quinine is strongly held at 32c. to 35c. per oz. Coca-leaves irregular in value, 23c. per lb. being the price. Cascara is an active article at 5 $\frac{1}{2}$ c. per lb. while American bleached beeswax is firm at 29c. per lb. Theobroma is easier, 43c. per lb. being the latest price, and salicin has advanced by 75c. per lb. and morphine by 15c. per oz.

London Markets.

ACID, CITRIC, is firmer, at 1s. 2 $\frac{1}{2}$ d. per lb., nominally, for English powder, although makers decline to quote meantime.

ACID, OXALIC.—Very firm, at 3d. to 3 $\frac{1}{2}$ d. per lb., delivered free London.

ACID, SALICYLIC.—Owing to the uncertainty of the market in view of the proclamation as to exportation of carbolic acid and certain other coal-tar products, makers of salicylic acid are not booking orders for forward delivery.

ACID, TARTARIC.—Unchanged, at the prices quoted last week.

ARROWROOT.—Steady. At auction on Wednesday good St. Vincent partly sold at 4 $\frac{1}{2}$ d. per lb.

BELLADONNA.—Very firm, with sellers at 40s. per cwt. c.i.f. for good medium root.

BORAX remains very firm at 16s. 6d. for crystals and 17s. 6d. for powder. There is practically no second-hand to be had.

BROMIDES.—Firm and unaltered, at 2s. 2d. per lb. for ammonium, 2s. 1 $\frac{1}{2}$ d. for sodium, and 1s. 10 $\frac{1}{2}$ d. for potassium.

CAMPHOR.—Crude remains quiet, without business of importance, at 160s. per cwt. c.i.f. for Chinese, and 165s. for

Japanese, the latter being easier. English refined is also quiet and unchanged. A diagram showing the fluctuations of the refined is printed on page 110.

CINCHONA.—The first London auctions of the year were held on Tuesday, when nine brokers offered 1,610 packages between them, the bulk consisting, as usual, of East Indian. The demand was good, the average unit being 1 $\frac{1}{2}$ d., or slightly above the values obtained in Amsterdam. The bi-monthly shipments from Java are returned at 216,000 Amst. lbs. only. In the drug-auctions on Thursday good thin Loxa quill bark sold at 1s. 1d. per lb., and Huanoco quill from 4d. to 7 $\frac{1}{2}$ d. per lb., according to quality. Cultivated flat Calisaya, sound, sold at 9 $\frac{1}{2}$ d. and 5d. to 7 $\frac{1}{2}$ d. for damaged. Cartagena was held for 6d., Maracaibo at 5 $\frac{1}{2}$ d., while Cuprea sold at 1d. per lb.

The following table shows the quantity offered and sold:—

Packages offered.			
East Indian cinchona	...	1,142,	of which 588 were sold.
Java cinchona	...	271	" 196 "
Ceylon cinchona	...	137	" 133 "
South American cinchona	...	60	" 40 "
		1,610	957
		Lbs.	
The American and Italian factories	...	...	100,612
The Brunswick factory	...	...	60,871
The Frankfort and Stuttgart factories	...	...	32,230
The Mannheim and Amsterdam factories	...	...	20,341
The Imperial quinine factory	...	...	7,078
Druggists, &c.	...	...	6,655
Total quantity of bark sold	...	227,787	
Bought in or withdrawn	...	139,654	

Total amount of bark offered ... 367,441

CEYLON.—Succirubra, original stem chips and shavings, 4 $\frac{1}{2}$ d. to 5 $\frac{1}{2}$ d. per lb. Renewed, ditto, 5 $\frac{1}{2}$ d. to 7 $\frac{1}{2}$ d.; hybrid, 5d.

SOUTH AMERICAN.—Bolivian cultivated calisaya good quills, 10d.

JAVA.—Ledgeriana: Original stem chips and shavings, 5d. to 6d.; branch, 2 $\frac{1}{2}$ d. to 4 $\frac{1}{2}$ d.; renewed stem, 5 $\frac{1}{2}$ d. Red: Original 4 $\frac{1}{2}$ d. to 5 $\frac{1}{2}$ d. Renewed, ditto, 4 $\frac{1}{2}$ d. to 5d.; and root, 5d. per lb.

EAST INDIAN.—Crown, poor, 2d. to 2 $\frac{1}{2}$ d.; medium, 3d. to 3 $\frac{1}{2}$ d.; good, 4 $\frac{1}{2}$ d. to 4 $\frac{1}{2}$ d.; renewed, 4d. to 5 $\frac{1}{2}$ d.; rich, 7 $\frac{1}{2}$ d. Ledgeriana: Natural chips and shavings, 6 $\frac{1}{2}$ d. to 7 $\frac{1}{2}$ d.; rich, 7 $\frac{1}{2}$ d. to 8 $\frac{1}{2}$ d. per lb.

After the auctions a further quantity changed hands at the limits. It is reported that the stock of cinchona in London is now considerably reduced, and a noticeable feature of the auctions was that the bulk of the offerings were parcels of recent import.

COCAINE.—Market still anomalous, makers quoting 20s. 6d. per oz. (no business), and second-hands have sold a little at 19s. per oz. One or two holders have sold out the bulk of their stock lately at about this figure, preferring to accept a reasonable profit now, so that stocks of good brands in second-hands are practically exhausted.

COPPER SULPHATE is slightly easier at 24d. to 25d. 5s. per ton spot, according to make.

CREAM OF TARTAR.—In fair inquiry at 73s. per cwt. for best white crystals and 2s. more for powder; ditto 95 per cent. 76s., 98 per cent. (B.P.) 78s., and 99 to 100 per cent. 79s. 6d. per cwt.

FERRI ET QUIN. CIT. has been advanced to 8d. per oz. in 1-oz. vials, and 7d. in 25-oz. tins.

GALLS.—Firmly held. To arrive, business includes 100 cases Chinese at 63s. 6d. per cwt. c.i.f. present shipment, and 150 cases Japanese at 59s. 6d. c.i.f. shipping weights. Blue Persian are in limited demand at the high prices asked.

GUM TRAGACANTH has again been in active demand, with good sales of lower grades of Persian at from 5d. to 6d. 10s. Bagdad firsts have sold at 14d. 12s. 6d., and seconds 13s. 15s. to 14d. per cwt.

INSECT-FLOWERS.—A Trieste correspondent reports that business is brisk, good sales having been made. Prices are fairly well maintained. The stock in Trieste at the end of December, 1899, was 264,900 kilos., the receipts during that month 4,700 kilos., and the deliveries 27,200 kilos. The

following were the current quotations, f.o.b. Trieste, on December 31:—Open flowers, 44s. 6d. to 46s. per cwt.; half-open, 52s. to 69s.; closed, 84s. to 92s.; and “wild,” 106s. to 108s. per cwt.

IODIDES.—Unaltered, at 13s. 10d. per lb. for ammonium, 11s. 10d. for sodium, and 10s. 6d. for potassium; 12s. for resublimed iodine, and 7½d per oz. for crude.

OIL. CASSIA. is slightly lower, sales of 80 to 85 per cent, having been made at 4s. 3d. per lb., spot. The c.i.f. price is slightly easier, at 3s. 7½d. to 3s. 8d. per lb., and business has been done at the inside figure.

OIL. COD-LIVER.—Quiet, and practically unchanged, at 75s. per barrel, c.i.f. In auction 5 barrels of brownish old oil sold without reserve at the high price of 65s.

BERGEN. January 13.—Few sales have been made this week in Lofoten non-congealing oil, and business is extremely dull. This quality could probably be bought now at 70s. per barrel, f.o.b. Bergen. The statistics to date for Bergen show an export of only 2 barrels, against 100 at the same time last year.

Mr. J. R. Holmboe, in his report of January 5, states that the stocks of 1899 oil are practically cleared. From the outside districts, where the winter fisheries have commenced, the fish are reported to be in good condition, with fat livers. For new Lofoten oil, February shipment, the price will probably be about 80s. per barrel, c.i.f. U.K. East Coast. All steamship companies have raised their rates considerably, which, in the case of c.i.f. sales, will have to be taken into consideration.

Messrs. A. Smit & Zoon, in their circular of January 10, quote 73s. c.i.f. per barrel for new steam-refined oil.

OILS, FIXED.—Fine Lagos *Palm* oil has been advanced 10s. per ton, spot now being quoted 26l. 10s. *Linseed* is very firm and fully 5s. dearer; pipes on the spot are quoted 23l. 10s. to 23l. 15s., barrels 23l. 15s. *Rape* is also firmer at 26l. 10s. for refined, spot. *Cotton* is very strong and advancing. refined on the spot is now quoted 23l. 15s. to 24l. 10s. per ton according to make. *Cocoanut* is firmly held and in good demand. Ceylon on the spot 25l. 10s. and Cochin 28l. 10s. per ton. *Olive* dearer at 34l. 10s. for Mogador, 33l. Spanish and 34l. 10s. for Levant. *Petroleum* Russian is firmer at 6d. to 6½d. spot; American unchanged.

OIL. ORANGE.—The tendency is higher; for a well known brand 7s. 7d. per lb. c.i.f. is wanted.

OIL, TURPENTINE.—Dearer, American on the spot being quoted at 38s. 7½d. to 39s. per cwt.

QUININE.—Immediately after the Amsterdam cinchona-auctions last week German manufacturers advanced the official price by 1d. per oz., now 1s. 4½d., with the understanding that they would sell to consumers only. This had a depressing effect on the second-hand market, as speculators had anticipated a more substantial advance, and prices on Friday dropped about ½d., spot selling at 1s. 4½d. to 1s. 4¾d., March, 1s. 4¾d. to 1s. 4½d., and May, 1s. 4¾d. to 1s. 4¾d. This week, however, renewed speculation, consequent on small shipments of bark from Java for the first half of the month, is apparent, and on Wednesday there was an advance of 1d., a good business being done for March delivery at 1s. 5½d., May at 1s. 5¾d., and July at 1s. 6d. German makers report sales of a fair quantity at 1s. 4½d. Howards' list-prices are now 1s. 6d. per oz. in 100-oz. tins, and 1s. 7d. in vials in 1,000-oz. lots, and 1-oz. vials of hydrochloride, 2s. 2½d.; hydrobromide, 2s. 2½d.; phosphate, 2s. 4½d.; salicylate, 2s. 2½d.; tannate, 1s. 3½d.; and valerenate, 2s. 5½d. per oz. To-day the market is quiet but firm, with sellers at 1s. 5½d. for March, 1s. 5½d. for May, and 1s. 5¾d. for June, with buyers at a fraction under. In the drug-auctions 1,000 oz. P. & G. brand in ten 100-oz.-tins, sold at 1s. 4d. per oz. The agents for the B. & S. brand report that after selling a few thousand ounces early in the week at 1s. 4½d., they are not now sellers, and have refused orders at this figure.

SALICIN has been advanced 3s. per lb. in consequence of small supplies and increased demand. For 1-cwt. lots 15s. per lb. net is now the price; 15s. 3d. for 28 lbs. and upwards; and 15s. 6d. for less than 28 lbs.

SODA CAUSTIC has been advanced to 107. 10s. per ton, or 70 per cent. spot, and 17. less for 60 per cent.

SODA HYPOSULPHITE is somewhat scarce, at 7l. 10s. per ton for kegs on the spot, and 7l. f.o.b. Tyne.

SODA NITRATE.—Advanced to 8s. 3d. per cwt. for refined, and 8s. for ordinary on the spot.

London Drug-auctions.

After an interval of six weeks the drug-sales were resumed to-day when twenty-two brokers brought forward goods. Business commenced at 10.30 A.M., and it was not until 4.30 P.M. that the last selling-broker descended the rostrum. Plentiful supplies of annatto-seed, asafetida, Sumatra and Siam benzoin, cardamoms, eroton-seed, gum myrrh, Rio and Cartagena ipecaec, kola-nuts, eucalyptus oil, rhubarb, Tinnevelly senna (over 1,000 bales originally advertised, but subsequently reduced to 738 all told), and beeswax, were offered. The tone throughout was dull as regards public business, and the following complete table shows the original packages offered and sold:

	Offered	Sold	Offered	Sold	
Aeonite (Jap.)	20	0	Ipecacuanha—		
Almonds	17	0	(Rio)	42	22
Aloes, Cape	80	17	Jalap	20	4
Curaçao	230	90	Kamala	23	0
Sotocrine	79	10	Kino	37	0
Zanzibar	41	7	Kola-nuts	113	27
Ambergris	5	0	Lemon-juice	5	0
Anethol	1	0	Liquorice-powder	10	0
Anise, star	7	0	“root	14	0
Aniseed Spanish	70	10	Lime-juice	36	0
Annatto-seed	147	16	Manna	1	0
Antimony (Jap.)	90	0	Matico	16	0
Areca-nuts	181	0	Menthol	8	0
Asafetida	669	45	Morphine (oz.)	500	500
Asphaltum	0	0	Musk	9	0
Balsam, Canada	1	0	Oil, anise, star	8	0
Copaiba	14	0	bay	4	4
Peru	9	0	bergamot (?)	8	6
Tolu	3	0	cajuput	45	0
Benzoin—			cassia	21	0
Palenbang	23	6	castor	133	20
Siam	63	34	cinnamon	16	5
Sumatra	175	48	citronella	29	0
Buchu	37	27	cod-liver	5	5
Calumba	211	16	eucalyptus	70	0
Canella alba	13	0	lavender	1	0
Cannabis indica	14	0	lemon-grass	44	0
Cardamom	578	390	lime	23	9
Cardamom-seeds	34	0	nutmeg	11	0
Cascara sagrada	124	0	orange	5	0
Cascarilla	47	11	patchouli	15	0
Castor-seed	2	0	peppermint	21	0
Chamomiles	3	0	rose (E.I.)	10	0
Chillies	48	0	sassafras	5	0
Cinchona	140	106	wood	10	0
Civet	2	0	ylang-ylang	1	1
Cocaine	1	0	Opium	4	0
Coca-leaves	15	0	Orange-blossoms	13	0
Cocculus indicus	35	0	“peel	52	3
Colo-cynth	39	4	Orris-root	46	2
Croton-seed	176	25	Otto, rose	5	0
Cubebs	96	38	Pareira brava	3	0
Cumin-seed	73	0	Pistachio-nuts	6	0
Cusens	13	0	Quassia logs (ewt.)	56	0
Cuttlefish-bone	10	5	Quince-seed	3	0
Dill-seed	33	0	Quinine sulphate, &c.,		
Dragon's-blood	34	2	1,000 oz. sold		
Elaterium	1	0	Rhatany	79	2
Ergot of rye	11	0	Rhubarb	288	17
Fennel-seed	10	10	Saffron	39	0
Galangal	34	10	Sandalwood	1	0
Gentian	31	0	Sarsaparilla	96	33
Gum arabic	106	0	Scammonium	22	0
aceroides	17	0	Scammony-root	25	0
ammoniacum	30	0	Senega	4	0
galbanum	15	0	Senna, Alexandrian	101	2
gamboge	12	5	Tinnevelly	738	602
grass-tree	3	0	Sesame	6	0
guaiacum	10	4	Soy, China	20	0
mastic	23	0	Sponges	125	0
myrrh	120	23	Squills	33	0
sagapenum	4	4	Strophanthus	24	0
tragacanth	30	10	Tamarinds	112	18
Honey, Australian	18	3	Tonka-beans	33	0
Honey—			Turmeric	101	0
Jamaica	11	0	Turtle, dried	20	0
Ignatius beans	10	0	Vanilla	6	4
Ipecacuanha—			Wax bees'	516	60
(Cartagena)	64	6	Japan	50	0

ALOES.—Cape was in good supply, and partially sold at 26s. for good bright, and 24s. 6d. to 25s. for fair to good seconds. Curaçoa in large gourds were a feature of this article: they sold at 56s. for fine brown livery; black and cayey ditto were bought in at 30s. A lot of 50 boxes coarse livery and dark, catalogued as Parbados, realised 21s. Zanzibar aloes were well represented, but the quality was poor; dark liquid in tins sold at 37s., and soft and treacly in skins at 24s. A few kegs of good hard Socotrine realised 75s.

AMBERGRIS.—No desirable quality was offered.

ANISEED.—Good Spanish partly sold at 25s. per cwt.

ANNATTO-SEED was in large supply, but only two bags found buyers at 2d. per lb.

ANTIMONY.—For Japanese crude an offer of 22*l.* 10s. per ton was refused, 23*l.* being wanted. Privately, regulus is quoted 39*l.* 10s. to 40*l.* per ton.

ARECA-NUTS. In better supply; for good bold Ceylon seed 19s. 6d. per cwt. was refused, the limit being 20s.; for another parcel of medium 17s. 6d. was refused.

ASAFETIDA.—The offerings were on a large scale, but not the slightest demand was evinced, except in the case of a few lots of fair quality, which sold at 60s. per cwt. for fair almondy block, part heavy; and 50s. for pale broken block, part loose. The bulk of the offerings consisted of heavy pinky block and greyish common block, much inferior to last arrival. A parcel of 25 cases common block (a shipment that had been rejected by the United States) was limited at 40s. per cwt. A parcel of 35 cases from the Persian Gulf sold at 67s. 6d. for good pinky almondy block, part loose; and from 62s. 6d. to 66s. for greyish almondy block, part heavy, with loose. Heavy block, part foul, with matting, brought 35s. to 40s.; darkish almondy block, 54s. to 60s.; doubtful ditto, heavy with matting, 30s.; and common block, with some loose, 25s.

BALSAM, CANADA.—For thickish balsam 1s. 5d. per lb. was wanted.

BALSAM COPAIBA.—The supplies to-day consisted of the Cartagena description, which were bought in at 1s. 4d. per lb., 1s. being refused in one instance. Small sales have been made in Liverpool of bright filtered Maranhão at 1s. 6d. per lb.

BALSAM PERU.—The limits in auction ran from 7s. to 7s. 6d. per lb.

BALSAM TOLU.—Still scarce and firmly held. Good fair, in small tins, was held to-day at 1s. 8d. per lb.

BENZOIN.—Both Sumatra and Siam were in better demand to-day at firm prices, which were as follows:—Sumatra: Fine seconds were held for 10*l.* 10s. per cwt. (9*l.* refused); fair seconds sold at 7*l.* 17s. 6d. to 8*l.* 12s. 6d.; and 5*l.* 17s. 6d. to 6*l.* 5*s.* for ordinary; common block (without reserve), 85s. Siam: Small blocky almonds, 90s.; good block, 80s.; and brown siftings in block, 64s. Good glassy Palembang realised the high figure of 80s. per cwt.

BUCHU.—Unchanged, fair round green leaf selling at from 10*l.* $\frac{1}{2}$ d. to 1*l.* 0*l.* $\frac{1}{2}$ d. per lb., and yellowish at 9*l.* $\frac{1}{2}$ d.; for long narrow green leaves 9*l.* $\frac{1}{2}$ d. was refused.

CALUMBA.—For nice yellow and bold washed root 52s. 6d. per cwt. was refused. Dull sorts sold at 16s.

CARDAMOMS.—Opened dull and irregular, but improved as the sales proceeded and prices were full up. The following prices were paid:—Ceylon-Mysore, good bold pale round, 3s. 6d. to 3s. 10d.; dullish ditto, 3s. 4d. to 3s. 5d.; good medium pale round, 2s. 7d. to 3s. 2d.; small pale, 2s. 3d. to 2s. 4d.; peas, 1s. 9d. to 1s. 10d.; brown and specky, 1s. 7d.; small to medium brown and open, 1s. 7d. to 1s. 8d.; splits, 1s. 7d. to 1s. 10d. Ceylon-Malabar, good medium brown, 1s. 9d.; lean ditto, 1s. 6d. to 1s. 7d.; and low mouldy, 1s. 5d. Seeds sold at 2s. 2d. to 2s. 6d. per lb., according to quality. Wild Ceylon brought 3s. 7d. to 3s. 11d.; and mouldy ditto, 2s. 6d. Indian Mangalore, 2s. 9d.

CASCARILLA.—Firmly held in auction, good bold quill selling at 75s., and siftings at 25s. Two other parcels were bought in.

COLOCYNTH sold at steady rates in auction, fair to good Turkey apple selling at 1s. 1d., to 1s. 4d. for sea-damaged.

CRUTON-SEED.—Large supplies were offered and, with the exception of a small quantity which sold at 38s., they were all bought in.

CUBEB.—Good brown but stalky berries sold at 22s.. and for greyish and stalky ditto 19s. was paid, subject to approval.

CUTTLEFISH-BONE.—Partly sold at 7d. per lb. for dullish mostly whole bone.

DRAGON'S-BLOOD.—Quiet. Good bright lump of fair colour brought 10*l.* 17s. 6d. per cwt. subject, and for low drossy ditto 7*l.* 12s. 6d. was paid. Good reeds were held for 10*l.* 10s.

ERCOT.—For weevily Spanish 3s. per lb. was wanted. Previous to the auctions a few bags of Russian had sold privately at this figure. The Hamburg market is reported to be practically cleared of stock.

FENNEL-SEED sold at 19s. 9d. per cwt.

GALANGAL partly sold at 24s.

GENTIAN.—There are a few spot inquiries privately, and one holder, who has a moderate quantity, quotes 15s. In auction a parcel was limited at 14s. per cwt.

GUM GAMBOGE.—Good pipe of fair orange fracture realised 8*l.* 7s. 6d. per cwt.

GUM, GUAIACUM.—In small supply, 1s. to 1s. 3d. being paid for good glassy resin; common and drossy sorts were bought in.

GUM MASTICH.—No business publicly. Retail sales have been made privately at 1s. 6d. per lb.

GUM, MYRRH, was in good demand to-day at firm prices; good pale picked Aden brought 5*l.* 2s. 6d.; and small to medium pale, 81s.; good pale chips brought 52s.; and chips and dust, 43s.; dark sorts, 18s.; siftings, 21s.; and dust, 15s.

GUM SAGAPENUM.—This gum-resin, now very rarely met with, was offered to-day "without reserve," and sold with good competition at 6s. 6d. to 6s. 9d. per cwt.

IPECACUANHA.—In better demand to-day at full up to dearer prices for Rio, and slightly easier for Cartagena, the latter description selling at from 7s. 3d. to 7s. 6d. per lb. for first and second-class country damaged, very damp. Good bold annulated was bought in at 8s. 6d. Rio sold at 12s. 3d. for good bold sound (12s. 6d. reported paid privately), and 11s. 9d. to 12s. per lb. for sound and first-class country damaged, according to quality. Thirty-three bales of Rio have arrived this week per the ss. *Danube* from Monte Video.

JALAP.—A few bales of small unworked Vera Cruz tuber sold at 6d. per lb.

KOLA-NUTS.—Sound West Indian brought 3d. to 3*l.* 4d., and slightly mouldy 3d.; for best lots 4d. was wanted. A few bags of small West African sold at 1*l.* $\frac{1}{2}$ d. per lb. subject.

The exports from Grenada, W.I., in 1898 were valued at 43*l.*, against 88*l.* in 1897, 18*l.* in 1896, and 133*l.* in 1895. From Lagos the exports in 1898 were valued at 23,052*l.*, against 21,190*l.* in 1897.

LIME-JUICE.—Business in raw West Indian juice has been done at 3s. per gallon, and there are further buyers at this figure, but 3s. 3d. is now the lowest.

MATICO-LEAVES.—Fair broken leaf was limited at 6d., and dark ditto at 4*l.* $\frac{1}{2}$ d.

MENTHOL.—Early in the week the market had a slight relapse, Kobayashi crystals selling at 9s. 9d. per lb., but since then the market is firmer, and 10s. spot has been paid. The temporary weakness was due to operators in Japan offering on this side at 10s. 4*l.* $\frac{1}{2}$ d. c.i.f., without finding buyers, their object being to try to depress the market. In auction 1 case of crystals was limited at 9s. 9d. per lb.

MORPHINE.—A parcel of 500 oz. Wink's hydrochloride sold at 4s. 6*l.* $\frac{1}{2}$ d. per oz., net. This identical parcel had been previously offered and sold. In second-hands there are sellers at 4s. 7*l.* $\frac{1}{2}$ d. to 4s. 8d. per oz.

MUSK.—Firmly held, although no business was effected

publicly. Of Tonquin pods, three caddies of fine thin blue-skin (few brown), and two or three broken, fairly dry, were held for 6*s.* 6*d.* per oz. Of third-pile pods, dampish, two caddies were bought in at 40*s.* per oz. For a case of "skins" a bid of 2*s.* 6*d.* is to be submitted. Three bottles of so-called Nepaul "grain musk," good fair quality, were bought in at 35*s.* per oz.

OIL, BAY.—West Indian distilled sold at 6*s.* 1*d.* to 6*s.* 3*d.*

OIL, BERGAMOT.—For a parcel offered as "bergamot" 4*s.* 1*d.* per lb. was paid without reserve. Another lot of genuine new crop was held for 7*s.* 6*d.*

OIL, CINNAMON. was represented by 5 parcels, consisting mostly of leaf oil, which was bought in with the exception of a small lot which sold at 1*3*/_{4*d.* For genuine bark-oil, Kadarana brand, 1*s.* 6*d.* was wanted.}

OIL, LIME.—Limits in auction appear to have been reduced, as several parcels were obtainable at prices ranging from 3*s.* 3*d.* to 3*s.* 6*d.* per lb. For a case of hand-pressed oil from Dominica 7*s.* 1*d.* per lb. was paid.

OIL, PATCHOULI.—A parcel of Fisher's brand was bought in at 6*1*/_{2*d.* per oz.}

OIL, PEPPERMINT.—In auction 10 cases of dementholised (Kobayashi) was held for 3*s.* 9*d.*, at which figure sales have been made privately.

QUINCE-SEEDS were held for 1*s.* 6*d.* per lb.

RHATANY partly sold at 4*1*/_{2*d.* per lb.}

RUBARB.—The market is quiet, and no animation to buy was shown to-day. A parcel of 17 cases new crop Shensi root, consisting of very fine quality, was offered and partly sold at 2*s.* 6*d.* for fine round medium, good coat, half-pinky and half-dark fracture; fine bold flat ditto, 2*s.* 11*d.*; and medium flat, three-quarter pinky fracture, 2*s.* 8*d.* per lb. subject; good Shensi pickings, round and flat, 1*s.* 1*d.* A parcel of 69 cases High-dried was offered, but no business was done, a bid of 8*1*/_{2*d.* being refused for good bold flat, and 7*1*/_{2*d.* for medium. The limits were 9*1*/_{2*d.* and 9*d.* respectively. Common round rough was bought in at 7*d.*, an offer of 5*1*/_{2*d.* being rejected. Small flat Canton sold at 8*d.*, and good pickings at 9*d.* down to 6*d.* per lb.}}}}

SARSAPARILLA.—Of genuine grey Jamaica root 38 bales were offered and sold with good competition at 1*s.* 8*d.* per lb. for sound; 1*s.* 7*d.* for first-class damaged; and 1*s.* 5*d.* for sea-damaged. Fourteen bales of Guayaquil sarsaparilla also sold at 1*s.* 1*d.* for first and second-class damaged. Lima-Jamaica was not in demand, several parcels being bought in at 1*s.* to 1*s.* 1*d.* Low, lean, pale native Jamaica brought 7*d.* per lb.

SENNA.—Tinnevelly sold in auction at slightly easier rates, 3*1*/_{2*d.* to 4*1*/_{2*d.* per lb. being laid for medium to fair green leaf; 2*1*/_{2*d.* to 3*1*/_{2*d.* for small to medium green leaf; and common brown and damaged, 3*d.* to 2*d.* per lb. Pods, 3*1*/_{2*d.* Of Alexandrian leaf 2 cases of good green whole leaf sold at 9*d.* per lb., and privately siftings have been selling at 2*1*/_{2*d.* A fair quantity of Tinnevelly ex auctions of December 16 has been sold at a profit on the rates then laid. The importers withdrew 600 bales, catalogued for auction to-day, for future sales. The s.s. *Peninsular*, arriving on January 20, has 287 bales on board. It is thought, as importers have withdrawn so much, they believe shipments of new crop will shortly come to an end.}}}}}}

SPICES.—There has been a fair business passing with firm prices for Ginger and Pepper. At auction on Wednesday all the Cochin *Ginger* offered was bought in with the exception of some small Calicut rough, mouldy and wormy, which sold at 24*s.* to 24*s.* 6*d.* per cwt. Fair washed rough Cochin is selling privately at 29*s.* 6*d.* per cwt. A parcel of Japan, wormy, was bought in at 23*s.*, but during the week sales of common to fair have been made at 23*s.* to 24*s.* 6*d.* per cwt. Bengal is now quoted 25*s.* per cwt. Zanzibar *Cloves* remain steady, a small lot of good fair sold at 3*2*/_{3*d.* per lb. The quotation for March-May delivery fluctuates slightly round 3*2*/_{3*d.* Ordinary Penang were bought in at 6*1*/₂*d.* per lb. *Clove-stems* partly sold at 2*d.* per lb. *Capsicums* are dearer, Bombay cherries rather mixed faded sold at 34*s.* 6*d.* to 35*s.* 6*d.* per cwt. Long on stalk were bought in at 32*s.* 6*d.* per cwt. *Pimento* is firm, being bought in at 3*2*/₃*d.* per lb., with business privately at 3*4*/₅*d.* to 3*5*/₆*d.* *Cassia lignea*}}

sold at 45*s.* per cwt. for recent crop; old crop being quoted at 50*s.* 6*d.* per cwt. *Pipper* is firmer; Singapore black is worth 5*1*/_{2*d.* per lb. on the spot, and 6*1*/_{2*d.* to 6*3*/_{16*d.* for arrival. Penang white partly sold at 8*3*/₈*d.* per lb.}}}

TAMARINDS.—Good Barbados realised 13*s.* per cwt.

TURMERIC.—No business in auction. Privately Madras is quoted 45*s.* to 47*s.* 6*d.* per cwt. for good to fine finger, and 30*s.* for Chinese finger. Cochin, split bulbs, 12*s.* per cwt.

WAX, BEES'.—Jamaica wax in demand at firmer prices, 14 packages being offered and sold, at from 7*l.* 5*s.* per cwt. for fine bright yellow, 7*l.* 2*s.* 6*d.* for fair red mixed, and 7*l.* for rather dark. Large quantities of East Indian wax were bought in. Good Mozambique, in pipes, brought 6*l.* 17*s.* 6*d.*; Madagascar, 6*l.* 10*s.* to 6*l.* 15*s.* for dark brown and partly wormy; brown Madras, 5*l.* 12*s.* 6*d.*; and Bombay, 5*l.* 17*s.* 6*d.* per cwt. Fine bleached in discs, from New York, 8*l.* No Zanzibar was sold.

WAX, JAPANESE.—Good pale square were held for 32*s.* per cwt.

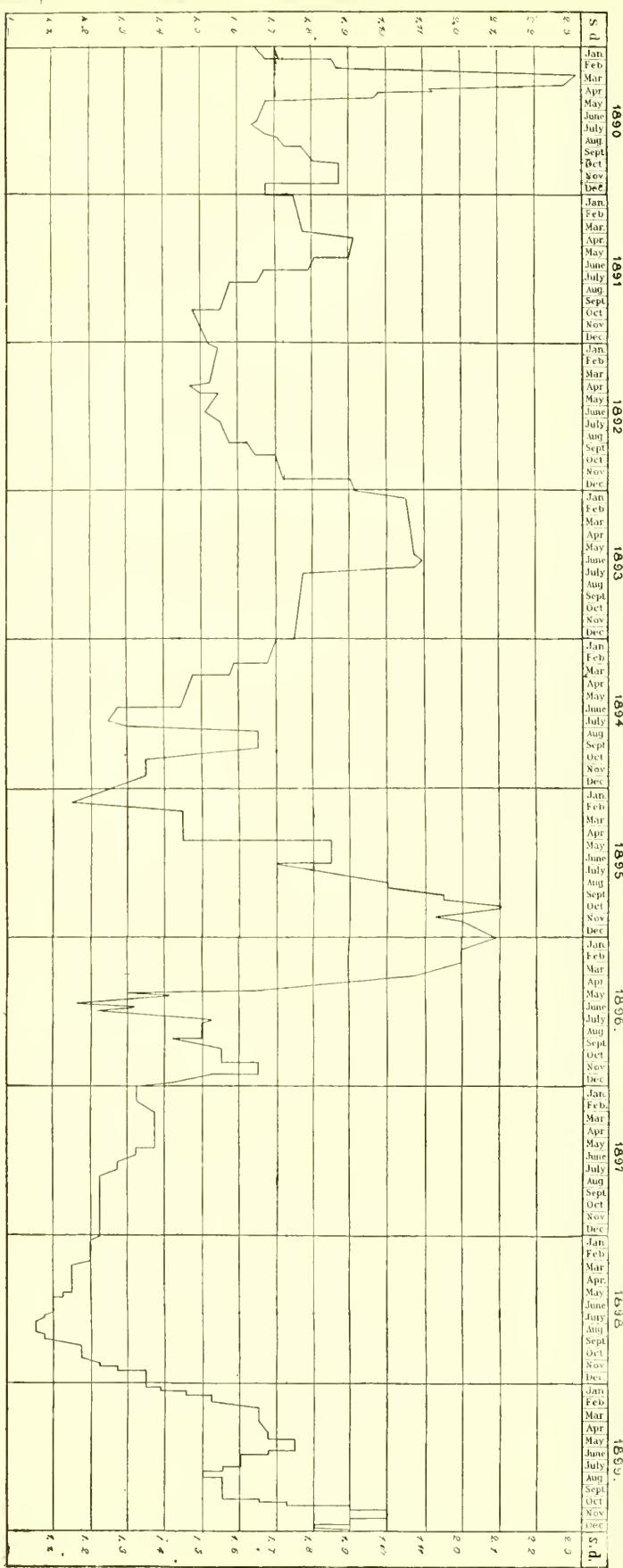
Late Law.

The Saccharin Corporation's Litigation.

In the High Court of Justice on Thursday (January 18), Mr. Justice Cozens-Hardy acceded to an application by Mr. Moulton, Q.C., that actions which were in the list against defendants named Quincey, S. Galloway & Sons, T. & H. Smith & Co., Pratt, and R. Reitmeyer & Co. should not come on before February 20. The learned counsel explained that the actions dealt with several patents, and had come unexpectedly into the paper. In acceding to the application his Lordship said he was reluctant to allow any actions to stand over.

Alleged Theft of Chemicals.

At the County of London Sessions, Newington, on January 18, the case against John Jones (30), Henry Parker (27), Jethro Lardent (33), herbalist, and William Edward Royou (39), for alleged theft of cod-liver oil, eamphor, iodoform, and quicksilver, the property of Messrs. Davy, Hill & Son, Yates, Hicks & Co., wholesale druggists, Park Street, Southwark, as reported in the *C. & D.* December 16, page 972, was proceeded with. Jones gave evidence against Lardent and Parkes. He said in November last he and Parker were in the "Holly Tree," Southwark Park Road, when Royou entered into conversation with them and asked him where he was working. Royou said, "Can you get me stuffs?" (meaning goods), and witness replied, "I do not know." Royou remarked, "If you can Lardent will have them." Some conversation ensued about some cod-liver oil, and, at Royou's suggestion, witness visited Lardent and said, "I have been speaking to a friend of yours named Royou about some cod-liver oil." Lardent asked where he was working, and, on being informed, said, "Can you get anything?" Witness replied, "A drop of cod-liver oil—about $\frac{1}{2}$ gal." Lardent remarked, "That is no good—only a shillingworth—a poundsworth would be better." Lardent then asked him if he had the handling of the cod-liver oil, and how much was at the premises. He replied that there were 60 or 70 barrels, and after some further conversation Lardent promised to give him 2*l.* per barrel. Witness returned to the public-house and informed Parker and Royou that it was all right, and arrangements were made for Parker to collect some goods from prosecutor's premises and to take them to Lardent. Witness accompanied Parker with three barrels of cod-liver oil, a quantity of iodoform, &c., to Lardent, who asked them to take the things into his premises. They did so, and Lardent paid witness 2*l.* 12*s.*, remarking that that was all the loose cash he had then. Witness received another 10*s.* from Lardent on the succeeding Saturday, and called several times subsequently for money, but Lardent was out on each occasion. Since they had been in custody Lardent said to him, "Get me out of it, and I will look after your wife and children." Some formal evidence was then given, and the case was then adjourned until Friday (January 19).



Coming Events.

Notices of meetings are inserted free in this section if received by the Editor not later than Wednesday of the week before the meetings are held.

Monday, January 22.

Society of Arts, John Street, Adelphi, W.C., at 8 P.M.
Mr. B. H. Brough will deliver the first of a series
of four lectures on "The Nature and Yield of
Metalliferous Deposits."

London College of Pharmacy. Dinner and Prize-distribution in the Venetian Chamber, Holborn Restaurant, at 7 p.m. Mr. T. Skewes-Cox, M.P., will preside.

Tuesday, January 23.

Royal Photographic Society, 66 Russell Square, W.C.,
at 8 P.M. Major-General Waterhouse will give a
note on "Dr. Vogel's method of preparing subhaloid
salts of silver."

Chemists' Assistants' Union, at the Horse-Shoe Hotel, Tottenham Court Road, commencing at 9 P.M. Annual meeting. The Secretary intimates that subscriptions are now due, and requests country members to communicate their present addresses

Wednesday, January 24.

Edinburgh Chemists', Assistants', and Apprentices' Association, 36 York Place, at 9.15 p.m. "What are the statutory functions of a Pharmacist?" and "Botany in January," by Mr. J. Rutherford Hill; "Dispensing Notes" by Mr. D. B. Kidd.

Dispensing Notes, by MR. D. B. Kidd.
Western Chemists' Association, Westbourne Restaurant, W., at 9 P.M. Smoking-concert.

Annual dinner at the Hôtel Métropole, Newcastle-on-Tyne. Mr. C. Ridley will preside. Tickets, 4s. each, can be had from Mr. F. Gilderdale, 19 Groat Market, Newcastle.

Thursday, January 25.

Liverpool Chemists' Association, Royal Institution,
Liverpool, at 7 o'clock. Annual meeting.

Chemists' Assistants' Association, 73 Newman Street, W., at 9 P.M. Impromptu discussion.

Midland Pharmaceutical Association, Mason College,
Birmingham. Paper by Mr. J. Spilsbury and Mr.
T. G. Joyce on "Balsam of Tolu."

Friday, January 26.

Royal Institution of Great Britain, Albemarle Street, Piccadilly, W., at 9 P.M. The Hon. Charles A. Parsons will discourse on "Motive Power—High-speed Navigation—Steam Turbines."

Glasgow Chemists' and Druggists' Assistants' and Apprentices' Association, 100 West Regent Street, Glasgow, at 9.15 P.M. "The Druggist as a Civil Servant," by Mr. J. P. Taylor.

THE Annual Ball promoted by the Sheffield Pharmaceutical and Chemical Society will be held in the Masonic Hall, Sheffield, on February 13. Tickets (single, 7s. 6d.; double, 12s. 6d.) may be had from Mr. H. Antcliffe, Union Offices, Westbar, or any local chemist.

MR. DOOLEY'S CURE.—If a man has a col' on the chist, get Casey's mixture f'r man an' baist, put him in bed, slap a mustard-plaster on him that'll keep his mind employed, an' lave them fight it out. May th' best man win. If the patient's alive in th' mornin' he'll not have stren'th to cough. —"Mr. Dooley," in the *New York Ladies' Home Journal*.

NEVER DOES IT.—Physician (giving advice): “Lastly, McGorry, don’t go to sleep on an empty stomach.”

McGorry (who is ailing): "No danger av thot, docthor: Oi always slape on me back."

